Administration Report
of the
Forest Department of the
Madras Presidency
1912-13 to 1914-15

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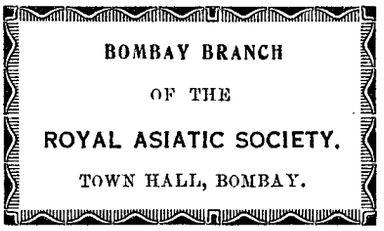

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ANNUAL ADMINISTRATION REPORT

OF THE

FOREST DEPARTMENT

OF THE

MADRAS PRESIDENCY

FOR THE

134089

TWELVE MONTHS ENDING 30TH JUNE 1913.

1912-1913.

20-3-12

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INDEX.

FOREST ADMINISTRATION REPORT,

MADRAS PRESIDENCY,

NORTHERN CIRCLE, 1912-1913.

Chapter.	Subject.	Paras.
I	Constitution of State forests—	
	1. Alteration in area	1 & 2
	2. Forest settlement	3
	3. Demarcation	4
	4. Forest surveys	5 & 6
II	Management of State forests—	
	1. Regulation of management—	
	(a) Preparation and control of regular working-plans ...	7 & 8
	(b) Annual plan of operations	9
	2. Communications and buildings—	
	(a) Roads and bridges	10
	(b) Buildings	10
	(c) Miscellaneous works	10
	3. Protection of forests—	
	(a) General protection	11 to 15
	(b) Protection from fire	16 to 18
	(c) Protection from cattle	19 & 20
	(d) Protection against injuries from natural causes ...	21
	4. Sylviculture—	
	(a) Natural reproduction	22
	(b) Artificial reproduction	23
	(c) Operations for the improvement of growing stock ...	24
	(d) Experiments	25
	5. Exploitation—	
	(a) System of management—	
	(i) Major forest produce	26 to 33
	(ii) Minor forest produce	34 to 37
	(b) Agency of exploitation—	
	(i) Government	38
	(ii) Purchasers	39
	(iii) and (iv) Right and privilege holders and Free-grantees	40
	(c) Outturn and sources of forest produce	41
III	Financial results	42
IV	Administration	43 to 52
V	General	53 to 62
	Appendices A to E and Forms Nos. 65 to 85.	

FOREST ADMINISTRATION REPORT OF THE NORTHERN CIRCLE

FOR THE

FOREST YEAR ENDING 30TH JUNE 1913.

CHAPTER I.—CONSTITUTION OF STATE FORESTS.

1. Alteration in Area.

The following statement shows the abstract of changes in forest areas :—

Class.	Area on 1st July 1912.	Added during the year.	Excluded during the year.	Net increase or decrease.	Area on 30th June 1913.
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
Reserved forests	4,617	..	3	— 3	4,614
Reserved lands	164	99	..	+ 99	263
Total ..	4,781	99	3	+ 96	4,877

Two small blocks each less than half a square mile in *Vizagapatam* and one such block in *Kurnool South* were constituted reserved forests and the remaining changes were due to recomputation of areas on recently published maps. Four blocks in *Gōdāvari Upper* (two over one square mile each and two less) and three in *Kurnool South* (less than half a square mile each) were made reserved lands.

2. The total forest area under the control of the Forest Department was 4,877 square miles which (excluding zamindari and inam lands) is 27·40 per cent. of the total area.

2. Forest Settlement.

3. Twelve blocks (161 square miles) remained to be settled at the commencement of the year, to which seven (99 square miles) were added during the year; of these, three blocks (·55 square mile) were transferred to reserved forests leaving 16 blocks (259 square miles) at the end of the year. Of these 16, settlement was completed and notification under section 16 was issued, but to take effect from 1st July 1913, for four blocks (5 square miles); publication of notification by Government was awaited for two blocks (·02 square mile); settlement completed but not reported to Board for two blocks (75 square miles); and settlement was proceeding for eight blocks (179 square miles), *i.e.*, one in *Ganjām* (70 square miles), one in *Vizagapatam* (10 square miles), four in *Gōdāvari Upper* (99 square miles) and two in *Kurnool South* (·03 square mile).

3. Demarcation.

4. Excluding demarcation of dupati lands in *Gōdāvari Upper* 59 miles have been newly demarcated at a cost of Rs. 1,854; 263 miles repaired at a cost of Rs. 1,543 and 4,657 miles recleared by Forest subordinates free of cost. The average cost per mile of fresh demarcation was Rs. 31–6–9 and of repair Rs. 5–13–10 against Rs. 19–2–7 and Rs. 1–13–10 in the previous year, the increase is due to payment in some districts having been made for the previous year's work.

4. Forest Surveys.

(*a*) *By Survey of India.*

5. No new work was undertaken during the year. Of the index maps undertaken during the previous year that for *Gōdāvari Upper* has been published and the rest are under different stages of completion.

(*b*) *By Departmental Surveys.*

6. During the year Rs. 10,626 were spent on Forest surveys and maps were prepared for 46 square miles of reserved forests. The chief work of survey done

were 92 miles in Chokkapad forests in *Ganjām* and alignment of 115 miles of a 700 feet level line in *Gōdāvari Upper*. Minor works such as alignment of roads, verification of boundaries, cutting of fire lines, etc., were done in the remaining districts. Seventy-six maps in *Ganjām* and 20 in *Gōdāvari Lower* were prepared for reserves; working-plan maps in *Kurnool South* and coupe maps in *Vizagapatam* were also prepared.

Dupati Survey.—Bhadrachalam dupati survey was brought to a close by completing 89 villages. There were 71 appeals, of which 45 have been disposed of.

CHAPTER II.—MANAGEMENT OF STATE FORESTS.

1. Regulation of Management.

(a) Preparation and Control of Regular working-plans.

7. *Preparation—Vizagapatam.*—Original working-plans for five reserves, and revised working-plan for one reserve, received during the year and returned pending final orders on Forest Committee's report as they related mostly to grazing, have not yet been received back. *Gōdāvari Lower.*—Statistics were collected for preparing final working-plans for Coringa and Kandikuppa reserves, but the progress was slow as there was no separate Range officer for the Delta Range for seven months. *Kistna.*—The working-plans for the reserves in Bezwada and Ellore Ranges for 92 square miles and the revision of the working-plan for Gopuvanipalem reserve were sanctioned. *Kurnool South.*—Working-plans for the Nallamalais in Giddalore Range, for the Railway Working Circle and for the Veligondas were received and returned for revision and have not yet been received back. The preparation of Owk working-plan is held under abeyance pending receipt of orders on Forest Committee's report. *Kurnool West.*—The revised working-plan for the Yerramalais and the preliminary working-plan for a portion of Gundlabrahmeswaram Range were sanctioned.

8. *Control.*—The working-plans for Mallavaram, Devancheruvu and Rāmēswaram reserves and for Peddapur Range in *Gōdāvari Lower* were cancelled. The prescriptions of working-plans have been adhered to in the main except in the following cases:—

Ganjām.—Less dead timber was extracted owing to want of demand and 11 fuel and bamboo coupes not prescribed for the year were leased out to contractors.

Gōdāvari Lower.—Thinning on the high forest system in Coringa reserve was not done as it was considered unnecessary.

Kistna.—The brushwood resulting from creeper cuttings and fellings was burnt for want of demand and spread over the coupe area.

Kurnool West.—Improvement fellings continued to be worked under the system of "Coppice with standards" in Atmakur and Velgode Ranges.

(b) Annual Plan of Operations.

9. The sanctioned plans were generally followed, except as detailed under working-plans above, and in the following instances:—Certain roads and buildings had to be given up, in *Ganjām* to curtail expenditure, in *Kistna* and *Kurnool South* as labour was not found, in *Gōdāvari Lower* and *Kurnool South* as other works were found more urgent, and in *Gōdāvari Lower* and *Kistna* as they were considered unnecessary. Certain felling operations had to be stopped in *Gōdāvari Lower*, *Kistna* and *Kurnool East* as contractors were subsequently forthcoming, and in *Kurnool East* as the demand was also otherwise met. Certain buildings had to be taken on hand in *Ganjām* and *Kurnool South* being more urgent though not provided for in the plan. A larger quantity of Kamala powder was purchased in *Ganjām* to meet the demand therefor. Hay-making in *Kistna* was given up as the previous year's operation resulted in loss. Subordinates quarters at Mallavaram in *Gōdāvari Lower* was not constructed owing to delay in acquisition of site. Further casuarina planting and watering in *Kistna* was given up under recent orders.

2. Communications and Buildings.

10. The following figures compare the outlay on communications and buildings:—

	1911-12. Rs.	1912-13. Rs.
Roads and bridges	41,458	35,887
Buildings	59,450	49,113
Other works	6,714	5,605

The decrease under all the heads is due to greater scrutiny exercised in selecting works and postponing works which were not urgently required in order that expenditure may be curtailed.

(*a*) *Roads and Bridges.*

The important works of a permanent nature carried out were—*Ganjām.*—Ten miles of new roads were constructed and 20 miles of existing roads repaired; a second bridge over Oddanginala was also constructed; *Vizagapatam.*—Seventeen miles of existing roads were repaired; *Gōdāvari Upper.*—The 700′ height level line commenced in the previous year was extended by 106 miles and completed; *Gōdāvari Lower.*—Mallavaram road which meets the local fund road at Rajavommangi and Rajavommangi-Boyapad cart-track were completed; *Kistna.*—Nallacherla-Kodigudem road was partly constructed; *Kurnool South.*—Nine miles in Isukagundam-Diguvametta road, three miles in Ahobilam-Raghupathimantapam road and five miles in Sandrapodu-Gundlamotu road were constructed; and *Kurnool West.*—Three miles in Aiyyavarikodur-Honkaram cart-track was constructed, and eight miles of the Central Nallamalai road repaired.

(*b*) *Buildings.*

The important works of a permanent nature executed during the year were the following:—

Extra Assistant Conservator's bungalow at Rusellkonda (nearing completion) in *Ganjām*, Range office at Jangareddigudem in *Gōdāvari Lower*, Range offices and quarters at Tarsingi in *Ganjām*, Yellamanchili in *Vizagapatam*, Turimella in *Kurnool East*, offices and quarters for Range staff in Railway Working Circle (completed) and Giddalore (completed) Ranges in *Kurnool South* and the two Plateau Ranges of Pecheruvu (completed) and Gundlabrahmeswaram (completed) in *Kurnool West*, Deputy Rangers quarters at Pajibara in *Ganjām*, Maddipenta in *Kurnool East*, Deputy Rangers and Foresters quarters at Malakondapenta for Gundlakamma and Railway Working Circle Ranges in *Kurnool South*, subordinates quarters at Rudracode, Pangidi, Pasurutla and Velgode in *Kurnool West*, rest-houses at Thamana (completed), Gambariguda (completed), Chahalli and Gerada in *Ganjām*, Thadaparti in *Vizagapatam*, Dornal in *Kurnool East* and additions such as kitchens, out-houses, etc., to existing buildings and several sheds to house forest guards and watchers', etc.

(*c*) *Miscellaneous works.*

The chief works done were the construction and repair of tanks, kuntas and wells, excavation of canals and channels and erection of fences.

3. Protection of Forests.

(*a*) *General Protection.*

11. The following statement shows the number and classification of forest offences brought to light during the year:—

Class.	Injury to forest by fire.		Unauthorised felling or appropriation of wood and minor forest produce.		Grazing without permission or in tracts in which grazing is prohibited.		Other offences.		Total.	
	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.
Reserved forests and lands.										
Cases taken into Court ..	11	8	540	516	206	186	57	49	814	759
Cases compounded ..	5	4	1,596	1,298	731	611	229	119	2,561	2,032
Cases undetected ..	137	139	89	92	7	6	6	3	239	246
Total ..	153	151	2,225	1,906	994	803	292	171	3,614	3,037
Unreserved lands.										
Cases taken into Court ..	..	..	..	55	..	..	..	1	..	56
Cases compounded ..	..	2	..	510	..	..	..	3	..	515
Cases undetected ..	..	1	..	76	..	..	..	..	..	77
Total ..	..	3	..	641	..	..	..	4	..	648
Grand Total ..	153	154	2,225	2,547	994	803	292	175	3,614	3,685

Last year's figures were not furnished for unreserved lands by some Collectors.

There has been a slight increase in the total number of cases contributed chiefly by offences under unauthorised fellings; grazing and other offences show decline. The total number of cases reported fell in *Ganjām* and two *Gōdāvaries* and rose in *Kistna* and three *Kurnools*; excepting in *Ganjām* and *Kurnool South*, offences under "Grazing without permits" showed decline. Unauthorised fellings increased in *Gōdāvari Upper* and *Lower*, *Kistna*, *Kurnool South* and *West*, in the last of which professional timber thieves were infesting Nallamalais near Atmakur, and a special enquiry to see who is responsible for such a state was being held; it is however gratifying in that district that all other offences show decrease.

12. There were 816 cases pending at the beginning and 585 at the end of the year; of these latter 163 were with Magistrates. Out of the cases brought to trial during the year 877 ended in conviction, 93 in acquittal against 740 and 58 respectively in the previous year; the percentage of failure being 9·59 against 7·27 in the previous year.

CLOSURE OF FORESTS TO GRAZING FOR NOT REPORTING OR PREVENTING ILLICIT GRAZING OR OTHER OFFENCES ON A LARGE SCALE.

13. Nowhere was the necessity found except in *Kurnool West*. A large number of standards in the Musalimadugu coupe of that district have been illicitly cut and the Sub-divisional officer was deputed to enquire and report if the reserve can be closed for the villagers.

14. Two thousand three hundred and three cases were compounded for Rs. 14,345 against Rs. 19,161 in the previous year.

15. Rewards were granted only in *Kurnool South* and *West*; in the former Rs. 12 were disbursed amongst Garladinne villagers for aiding in the detection of a case of illicit removal of timber from Jaladurgam reserve, and in the latter Rs. 40 were disbursed amongst forest subordinates and two private individuals in four cases of illicit removal of timber and one of grazing 600 goats and 40 sheep, and Rs. 8 to eight men in helping in the recapture of the elephant Ravi; rewards were also granted to Chenchus for protecting a large area of the forest round their gudems from fire.

(*b*) *Protection from fire.*

16. The areas attempted and protected are given in Form No. 72. The system of protection was not altered except in *Kurnool South* where a fire line in Sirvel Range was given on contract to be cut free of cost to Government, in return for which the contractor was allowed to take free the produce resulting in the operation. The work was satisfactorily done and reduced fires in that range. In all Goomsur ranges of Ganjām except Pondakhol the boundary between the zamindary and agency tracts was converted into 60′ wide fire line. In *Gōdāvari Lower*, 99 miles of boundary of Papikonda, Kovvada and Kopalli reserves were widened to 40′ to prevent crossing of fires. In *Ganjām*, the fire season was short but sharp, almost all fires occurring in the latter half of May 1913, the unprotected hill areas were almost all burnt owing to the carelessness of the subordinates; in several reserves of Surada Range the cause for fires were the kindling by graziers, to punish whom the Board sanctioned the collection of double-grazing fees in three reserves during 1913-14; Khonds, except in one or two instances, assisted in extinguishing fires, in return for which they were allowed the usual concessions; the Khond villages which neglected this work had their concessions cancelled; in Pondakhol, the Khonds were rewarded with rice also, worth Rs. 246, for help rendered. In *Vizagapatam*, though the season was exceptionally dry the results have been more favourable than the previous year. In *Gōdāvari Upper*, large areas were burnt but correct statistics were not furnished owing to Range officers—Nugur and Cherla—not furnishing fire occurrence reports for 82,570 acres; the delinquents will be suitably dealt with. In *Gōdāvari Lower*, also the figures furnished are of doubtful accuracy, a Deputy Ranger and a Forester who failed to extinguish fires in their beats were punished; a fire protection scheme for this district is under preparation. In *Kistna*, the season was a mild one. In *Kurnool East*, the protection was reported to be better owing to the tactful way in which a Deputy Ranger managed the Chenchus; the system of departmental collection of Ippa flowers for free distribution to Chenchus had also the effect of reducing fires. In *Kurnool South*, certain permanent fire patrols were suspended for two months for not extinguishing fires in their charges or not finding out their source; fires in Railway Working Circle Range were reported, in a great measure, to have been due

to departmental cartmen firing to facilitate their dead wood collection work. In *Kurnool, West*, it was satisfactory to note the keenness with which the Chenchus of Sudem, Pangidi and Rudracode tried to protect the forests in their neighbourhood to earn reward. This is no doubt a great step in advance, for they were the persons from whom incendiarism was dreaded in the past; the consequence this year was that a large area never before protected has been saved; the full reward, of course, of Rs. 200 was sanctioned for them; the whole of Nandyal Range was burnt over owing to the unsettled state of the fire line boundary between the *South* and *West* divisions, but arrangements have since been made to settle this question in a practical way: in Atmakur Range the Chenchus indulging in dacoities burnt also a lot of forests; they would not obey the order regarding the collection of Ippa flowers.

17. Rupees 57,561 were spent on fire protection during the year. The area dealt with was 4,479 square miles against 4,461 square miles in the previous year. Of these, 3,745 square miles were successfully protected against 3,643 square miles in the previous year; the proportion of failures fell to 16·39 from 18·32 per cent. in the previous year; the cost per square mile successfully protected fell to Rs. 15–5–11 from Rs. 17–7–3 in the previous year.

18. The following statement shows the number and origin of fires :—

Division or circle.	A. Fires caused by accident or through carelessness in burning fire lines.		B. Fires entering the forest by crossing exterior fire traces.		C. Fires beginning inside the reserve or fire-traced areas. Owing to carelessness or accident. By workmen employed in the forest, by purchasers of forest produce and by hay-cutters.		By villagers, travellers, etc., passing through the forests		By railway engines.		By lightning or fire-balloons.	
	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.
1	2	3	4	5	6	7	8	9	10	11	12	13
Ganjām	..	..	..	..	..	..	..	..	..	..	..	..
Vizagapatam	1	2,000	4	1,600	6	1,334	6	12,131	..	..	..	..
Gōdāvari, Upper ..	..	..	9	14,919	..	..	2	355	..	..	..	..
Gōdāvari, Lower ..	..	..	12	12,878	2	1,600	38	1,856	..	..	..	..
Kistna	3	34	..	..	..	..	9	334	..	..	..	..
Kurnool, East	..	..	..	..	..	..	6	3,855	..	..	..	..
Do. South	8	17,670	7	6,902	..	..	13	13,775	2	153	..	..
Do. West	1	·20	6	1,250	2	110	16	6,672	1	6	..	..
Total for 1912–13 ..	13	19,704·20	38	37,549	10	3,044	90	38,981	3	159	..	..
Total for 1911–12 ..	17	2,079	48	143,672	10	5,830	58	1,00,131	1	5	..	..

Division or circle.	C. Fires beginning inside the reserve or fire-traced areas—*cont.* By intentional firing. In order to obtain new grass.		In order to turn out game or to reduce cover.		Maliciously fired.		Total.		Causes unknown.		Total A, B and C and causes unknown.	
	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.
	14	15	16	17	18	19	20	21	22	23	24	25
Ganjām	..	..	..	..	3	105	3	105	92	51,354	95	51,459
Vizagapatam	2	1,360	..	..	..	..	14	14,825	8	699	27	19,124
Gōdāvari, Upper ..	..	..	1	3,200	..	..	3	3,555	12	100,531	24	119,005
Gōdāvari, Lower ..	..	..	..	..	..	..	40	3,456	11	3,272	63	19,606
Kistna	..	..	..	..	..	..	9	334	..	..	12	368
Kurnool, East	2	1,290	..	..	..	..	8	5,145	22	97,986	30	103,131
Do. South	..	..	..	..	..	..	15	13,931	28	19,183	58	57,686
Do. West	4	135	..	..	6	44,012	29	50,935	29	69,245	65	121,430
Total for 1912–13 ..	8	2,785	1	3,200	9	44,117	121	92,286	202	342,270	374	491,809
Total for 1911–12 ..	3	2,163	13	4,318	16	32,737	101	145,184	133	200,355	299	491,290

There seems an appreciable increase in the number of cases, though the area burnt remains nearly the same as in the previous year. Too much reliance must not be placed on these figures, as some Range officers still suppress facts, though such irregularity is undoubtedly less than it used to be. From the figures furnished it is seen that the number of cases decreased under A and B, *i.e.*, " Fires caused by accident on through carelessness in burning fire lines " and " Fires entering the forests by crossing the exterior fire traces ", but considerably increased under C, *i.e.*, " Fires beginning inside the forests or fire traced areas " and " Causes unknown ".

(*c*) *Protection from Cattle.*

19. Out of 4,877 square miles 898 were closed to all animals throughout the year against 811 in the previous year, *Kurnool*, *South* and *East*, contributed to the increase. 155 square miles were open to goats against 156 in the previous year.

20. The following statement shows the cattle impounded during the year compared with the average of the three years preceding :—

Districts.	From open forests.		From closed forests.				Total.		Average for three years ending 1911–12.
			Holding permits for open forests.	Having no permits.	Holding permits for open forests.	Having no permits.			
	1911–12.	1912–13.	1911–12.	1911–12.	1912–13.	1912–13.	1911–12.	1912–13.	
Ganjām ..	3,273	1,883	..	240	..	290	3,513	2,173	3,791
Vizagapatam .	1,034	786	..	1,209	..	80	2,243	866	2,536
Gōdāvari, Upper.	329	53	..	379	..	..	708	53	240
Do. Lower.	549	513	..	704	312	418	1,253	1,243	1,258
Kistna	2,881	1,891	274	897	686	1,146	4,052	3,723	3,810
Kurnool, East ..	7,201	4,210	.	..	..	..	7,201	4,210	3,313
Do. South.	6,374	1,614	162	681	121	246	7,217	1,981	8,296
Do. West ..	8,904	9,418	..	1,792	..	1,514	10,696	10,932	13,462
Total ..	30,545	20,368	436	5,902	1,119	3,694	36,883	25,181	36,705

The averages show fall in all districts but *Kurnool*, *East*, and the past year's figures show a small rise in *Kurnool*, *West*.

(*d*) *Protection against injuries from natural causes.*

21. In *Ganjām*, the spread of root fungus *Trichosporum vesiculosum* in Agastinowgam plantation has practically stopped but *Arebela tetraonis* continued its depradations. In *Gōdāvari*, *Upper*, the attack by Jacids on teak leaves has not spread. In *Godāvari*, *Lower*, the root fungus continued its destruction in Kandikuppa and Bendamurlanka plantations. In *Kistna* the burning of the debris and spreading the ashes on the area to be planted to prevent insects was continued with good results. No damages by the *borer* or *blister fungus* were done in any of the casuarina plantations, but sandalwood borer was found to kill sandal plants in Kandikuppa reserve. In *Kurnool*, *East* and *West*, leaf defoliators attack teak as usual, and in the former district sandalwood branches were also attacked by some insects.

4. Sylviculture.*

(*a*) *Natural reproduction.*

22. Reproduction from seed in *Ganjām* of sal, sahajo, paisal and sissua was good; in *Vizagapatam*, very good generally in many localities, and especially so of satinwood almost everywhere; in *Gōdāvari*, *Upper* and *Lower*, of kondathangedu, chiruman, etc., good; in *Kistna*, in all unburnt closed areas of Ellore range good, in all the reserves of Bezwada excellent; in *Kurnool*, *East*, of nallamaddi, billudu, chirumanu, tunki, and kanuga along the banks of streams, good; in *Kurnool*, *South*, of yegi, teak and blackwood poor to *nil*, yegi and ippa totally failed, and in *Kurnool*, *West*, of yegi, jittegi, etc., numerous and excellent all over the areas where cover has been removed, but in Atmakur range the young advanced growth of

* List of trees with their scientific names will be found in Appendix E.

teak was damaged considerably by the fire in the improvement coupe. Reproduction from coppice shoots, in *Ganjām*, of sal was vigorous in the coupes worked over; in *Vizagapatam*, excellent in all such coupes; in *Gōdāvari*, *Lower*, good to very good, except of bamboos due to bad cutting by contractors for which they were punished; in *Kistna*, satisfactory in Bezwada and Ellore ranges, and in *Kurnool*, *West*, vigorous in improvement felling and fuel coupes, but damaged in Nandyal range owing to spreading of fire through the coupes. Root-suckers, in *Kurnool*, *West*, of jittegi and tumki were observable throughout the improvement felling coupe. In *Kistna*, musti yielded no crop, soapnut and tamarind poor crop in Ellore range, but mangrove was abundant in some reserves. In *Kurnool*, *West*, jittegi was plentiful except where bamboo growth was thick.

(*b*) *Artificial reproduction.*

23. Form 75 shows the areas under plantations and topes or subject to cultural operations.

Regular plantations.—*Ganjām*: Agastinowgam plantation was ordered to be abandoned as soon as the stock in it is cleared out. Malabar cocoanut trees continue to grow slowly. Red sanders in Napier's Park flourish exceedingly well. *Vizagapatam*: Red sanders dibbled along the ghat road in Sanivaram and Dharakonda reserves and on 9 acres in Pandirimamidi germinated, 305 on the former and 40 on the latter but only 133 in all were surviving. Mixed species were sown on 20 acres in Rambilli reserve. *Gōdāvari*, *Upper*, Plants put out in the previous year were reported to be generally doing well, but most of them in some localities have died away; planting in bungalow compounds with teak, jittegi and mango continued. *Gōdāvari*, *Lower*: Compartment XIV of Kandikuppa and V of Bendamurlanka were planted with casuarina. *Kistna*: 10,400 plants of mixed species such as casuarina, sissu, were planted over 9 acres in Narasapur plantation of which 15 per cent. died. *Kurnool*, *East*: teak, yegi and sandal were sown in the five plantations existing, and the results were very poor in Peddamantrala and Telugurayanicheruvu, fair in Maddipenta and good in Chinamantrala and Peddachama. In the last, numerous teak seedlings have established themselves; owing to scarcity of water, these plantations, as such, are failures, but as a means of getting all the Chenchus together and under control have been most useful; the services of the Chenchus will now be utilized in other more useful directions. *Kurnool*, *South*: The plantation at Ahobilam has been given up owing to scarcity of water; the remarks in *East Kurnool* apply, but the plantation is in a better condition as such. *Kurnool*, *West*: The plantations in this division are eminently successful owing to abundance of perennial water; and it is a great thing to note that these useful works have been carried out by Chenchus, a tribe formerly considered quite outside the pale of civilization. That at Bairluty was closed at the end of the year after planting five acres with teak, neem and mixture of nallamaddi, jittegi and mahagony as there will be no work in it for the future. It is in excellent condition the biggest teak plant therein being about 12 feet high. In Nagaluti 40 acres were planted with teak, neem, mallamaddi, chinduga and red sanders, 75 per cent. survived. The brick channel in it was extended to run for nearly half a mile to facilitate irrigation; the largest teak plant here measured about 12 feet and neem 14 feet. In Velgode range 23 acres at Sudem, 38 at Pangidi, 34 at Rudracode and 35 at Pasurutla were clear felled, and teak, neem, yegi. Nallamaddi and nallachinduga seeds were sown (teak seeds formed 50 per cent.). Besides these 1,100 mahagony and 12,000 red sanders were also planted in them; teak grew best, neem came next, yegi and red sanders were slow in coming. The areas planted at Sudem and Pangidi stand best, even though watering in the former was stopped for two months, and in the latter for a fortnight in summer. At Pasurutla the seedlings were slow in coming up, but the sandal areas at Pecheruvu produced good results. In the sandal areas, grass and the tops and branches of hosts were removed for allowing space to the growing sandal. At Honkaram 12½ acres were cleared and teak, neem, satinwood and dirisana were planted; teak and neem were flourishing and the other two appeared to have slow growth.

Taungya operations.—No operations were undertaken during the year. The 10,000 teak, 8,300 yegi plants reported last year to have been surviving, have died during the year.

Cultural operations.—*Gōdāvari, Upper*: 2,833 teak and 472 jittegi were newly planted during the year at Darapalli out of which and the previous years' plantings 8,033 teak, 2,324 yegisi, 1,309 jittegi and 10 jack are reported to be surviving. *Gōdāvari, Lower*: Mangrove seeds were sown on 100 acres of Kandikuppa and 121 acres of Coringa reserve but the results were poor apparently because the areas were on a higher level and beyond the reach of ordinary tides of the sea. Teak, nallamaddi, chairumanu and margosa sown in Rajahmundry reserves were not also successful. *Kistna*: Teak, red sanders, etc., sown in coupes worked over in Bezwada range and similar valuable species sown in five reserves of Ellore range germinated, but died in the hot weather; babul seeds sown on three cotton growing areas in Bandar range shared similar fate; basketed teak plants however were thriving well, so also the 615 sandal plants in Kondapalli bungalow. *Kurnool East.* Teak raised in bamboo tubes did not thrive well, so the plants were transferred to baskets, but these were found to rot in nine months. *Kurnool, South*: Over 48 acres in coupe 6 of Owk Working Circle pits were dug and mounds made, seeds were sown in coupe 5 and casualties in other coupes were refilled. This work is being stopped, as it is unsuccessful and not on sound principles. *Kurnool, West*: Sowing of yepi and neem on 1 coupe of Woddaman, and of babul and neem on 2 of Veldurti, was made on mound and trench system, but the results were not good as the sowings were late; the delay could not be avoided as the making of trenches takes a long time and could not be taken up before the monsoon as the ground then would be very hard; so one year's mounds will have hereafter to be used the next year. To give work to the Chenchus as usual at Indreswaram, mound sowings were made on ten acres, the plants came out very well but owing to failure of monsoon only 105 survive. On fifty acres in Musalimadugu old fuel coupe neem, teak, etc., were dibbled, 50 per cent. germinated but almost all died in summer; as this operation proved a thorough failure in successive years, it will not be carried out next year.

Wholesale cultural operations will hereafter be put a stop to in most places, but certain experiments in certain localities, *e.g.*, babul on the salt swamps of the delta, or the introduction of certain valuable species, *e.g.*, sandal and red sanders, in suitable localities, or the utilization of certain hill tribes, *e.g.*, Chenchus, Koyas, etc., on such operations to keep those tribes together and under control, must be persisted in. Planting the reclaimed area round the Conservator's bungalow at Waltair has now been completed.

(*c*) *Operation for the improvement of growing stock.*

24. Improvement felling, thinning, coppicing, clear felling, cleaning and weeding and removing dead wood for the improvement of growing stock are detailed under "Exploitation."

Creeper cutting.—This was done as usual by subordinates in *Ganjām* and *Gōdāvari Lower*, and creepers and thorny bushes were systematically removed in coupes prior to felling by contractors in *Kistna*. *Fencing.* The coupes felled in Kondapalli reserve in *Kistna* were fenced; in Owk Working Circle, *Kurnool South* it was done in addition to cultural operations there.

(*d*) *Experiments.*

(i) *On species.*

25. *Sandal—Ganjam.*—Seedlings raised in building compounds were planted with hosts in baskets in good soils, and on broken grounds near other suitable hosts; if the latter fare well much of such areas in reserves can be turned to advantage; 28 plants were planted in Napier's Park. *Vizagapatam*: twenty plants in Nathavaram rest-house and Narasapatam range office compound were thriving well, seeds from the latter sown in pots germinated freely. *Gōdāvari Lower*: A small quantity of seed was sown in four reserves of Rajahmundry in three of which none germinated and in the fourth those that came up died subsequently. 1,400 trees in the Conservator's compound at Waltair are doing well; half a bag of seed was collected and put down and 200–300 seedlings raised.

Mahagony—Ganjām.—The seeds planted in 1908–09 grew slowly. *Vizagapatam*, Waltair: 1 lb. of large leaved mahogany was received, but very few germinated;

58 trees previously planted still exist *Gōdāvari Upper*: the three in Pulusumamidi range were thriving.

Red sanders—Ganjām.—Those on one acre in Napier's Park about two to six years old were growing exceedingly well, those damaged by the cyclone of 1909 have revived, the large boles coppiced then sent up vigorous shoots. *Vizagapatam*, Waltair: there are 261 trees in the Conservator's compound, the tallest 18'. *Gōdāvari Upper* The two in Rekapalli hill reserve are doing well, *Kurnool West*: these were planted in four plantation centres at 3,000 each; their growth was slow in the beginning, but careful weeding accelerated it.

Logwood—Vizagapatam, Waltair.—There are 359 trees in the Conservator's compound; they grow slowly at first, but suddenly shoot up and thrive well. *Gōdāvari Lower*: Those sown in 1911–12 were thriving in Kandikuppa.

Divi Divi—Gōdāvari Upper.—The three in Edugurallapalli, two in Singaram and one in Tunikicheruvu continued to thrive.

Rubber—Para.—Eighty were planted in Sanivaram but very few survived probably owing to over-exposure to sun and attack by white ants; out of 62 already existing in Pandirimamidi 18 died and the rest thrive.

Ceara.—There are 9 trees in the Conservator's compound at Waltair, *Vizagapatam.*

Assam.—There are 110 trees in the Conservator's compound at Waltair, but they do not do very well, and when young are liable to be attacked by white ants.

Catalpa—Ganjam.—The five which were healthy last year still live, but grow slowly.

Cocoanut—Kistna.—Those in Gopuvanipalem were doing well.

Edible date—Godavari Upper.—One in Murmur bungalow is doing well, two in Boddigudem bungalow are growing slowly and out of 13 in Kunavaram bungalow 11 were washed away in Gōdāvari floods, and the rest thrive.

Loquat, apple, litchi and mango—Vizagapatam.—Half a dozen in each were put out in Sanivaram rest-house, of which two loquat and one litchi died, and the rest thrive.

Pinus longifolia—Vizagapatam.—2,391 seeds were sown in the nursery beds in Sanivaram bungalow compound, out of which 1,097 germinated, they were not thriving owing to white ant attack and consequently attempts were made to transfer them to bamboo baskets.

(ii) *Other points.*

(*a*) *Olibanum*—Kondamamidi were again tapped for this article but without success in *Kistna.*

(*b*) *Test of annual increment.*—With a view to determine the rate of growth in Goomsur areas in *Ganjām*, one acre in each of three coupes was cut over, where felling was carried out at the same time the previous year and where consequently the regrowth was one year old; the outturn was weighed and found to be 4 tons per acre on an average. This is an important experiment, Brandis gives 3 tons as very good for red sanders and other species; casuarina also gives about 3 tons as yearly increment.

(*c*) *Charcoal.*—An experiment in converting dead sal logs on fire lines into charcoal was tried in *Ganjām*, but had to be given up as profitless.

(*d*) *Value of protection.*—The value of rigid protection was beautifully exemplified at Gundlabrahmeswaram in *West Kurnool*; eight years ago that area was a series of cattle pentas, the whole place had been mutilated by hacking, fires raged through it yearly, and often two or three times a year, and the ground between the scattered trees was covered with dense bamboo and climbers, but of reproduction there was practically none; for the last six years grazing and hacking have been stopped *in toto*, and for five out of the six years the area has been rigidly protected from fire, a big fire last year unfortunately occurring; during the past year 250 acres have been cleared of bamboo and climbers, stock being taken, acre by acre, and of reproduction over 300,000 young plants have been found, of which over 66,000 were of *Blackwood*, *Ougeinia*, *Teak* and *Pterocarpus marsupium.*

5. Exploitation.

(a) System of management.

26. The total area for which regular working plans were sanctioned was 1,345 square miles and the areas dealt with under the different sylvicultural systems are detailed below :—

Sylvicultural systems.	Area in sq. miles.	Per cent.
(1) Clear felling	117	8·7
(2) Selection felling	* 438	32·6
(3) Simple coppice felling	35	2·6
(4) Coppice with standards felling	285	21·2
(5) Improvement felling	† 49	3·6
(6) Unworked area	421	31·3
Total ...	1,345	100

Working-plans have been held in abeyance awaiting, first the report of the Forest Committee, and secondly the Government orders thereon; but little can be done until areas required for grazing have been separated off from other areas, there can be no proper reproduction for fuel and timber growth where there is grazing, and in grazing areas such reproduction is necessary for fodder requirements at times when there is no green grass, wherefore the amount required to be eaten should just balance the capability of the soil to reproduce it, with just a slight margin above in the latter to guard against accidents.

(i) *Major Forest Produce.*

(1) *Clear or regeneration fellings.*

27. Two coupes in *Gōdāvari Lower* were sold to contractors to be worked under this system : 5 in Bezwada, 3 in Ellore, and 3 in Bandar ranges in *Kistna*; and the areas required for regular plantations in *Kurnool West* were similarly treated.

(2) *Selection Fellings.*

28. One hundred and twenty large girth sal, dead and dying sal in seven blocks were felled in *Ganjām*, and 2,034 dead and dying sal were selected in the same district but not felled for want of demand. The indent system for valuable species in unreserves, which has been in force here for the previous five years, is growing in popularity. Dead and suppressed trees in two plantations in *Gōdāvari Lower*, soft wood in two coupes in *Kistna*, were sold to contractors. Dead timber and fuel from the reserves of four ranges in *Kurnool East*, from old coupes and fire lines, and green timber and fuel from newly cut lines in *Kurnool South*, and dead timber from hill forests in *Kurnool West*, were removed under this system.

(3) *Regular thinnings.*

29. Fuel in 3 compartments of Bendamurlanka and 2 of Kandikuppa plantations in *Gōdāvari Lower*; fuel in 12 coupes and bamboos in 2 coupes 8 compartments in *Kistna*; and bamboos in the leased out coupes in *Kurnool East* were removed by thinning.

(4) *Improvement fellings.*

30. Bamboos from 4 coupes in Goomsur and 2 in Berhampur ranges in *Ganjām*, dead and badly grown teak and billudu were felled in 3 reserves of Ellore range, *Kistna* district, and the right to fell and remove bamboos from certain coupes of the Railway Working Circle and Sirvel ranges of *Kurnool South* was leased out to contractors for the purpose of giving light to the natural reproduction of the better species.

(5) *Coppice with standards.*

31. Six fuel coupes in *Ganjām*, 281½ acres in *Vizagapatam*, 2 coupes in Coringa reserve in *Gōdāvari Lower*, and 3 coupes in *Kistna*, were worked under this system.

* Coppice with standards also was worked on 31 square miles.
† Do. do. 44 do.

(6) *Simple coppice.*

32. Six fuel coupes in *Ganjām*, 20 in *Gōdāvari Lower*, were worked under this system.

(7) *Unregulated fellings.*

33. The right to collect small timber from uureserves which were roughly divided into coupes in 4 ranges of *Gōdāvari Upper* was leased out for Rs. 19,754, and the right to collect bamboos from 2 ranges of the same district, was given on contract for Rs. 8,245. In *Gōdāvari Lower* such fellings were confined to Rampa and the unreserves, and in *Kurnool East* and *West* to some reserves for palmyra trees.

(ii) *Minor Forest Produce.*

(1) *Miscellaneous produce.*

34. In all districts seigniorage was collected on gravel earth and other minerals. The usufruct of mango, tamarind and other fruit trees was sold in auction ; the collection of tangedu and other barks, honey, wax, myrabolams, hides, horns, etc., was leased out. The chief deviations were :—In *Ganjām* a majority of topes and trees were left to the enjoyment of Khonds, in *Vizagapatam* and *Gōdāvari Lower*, seigniorage was collected from purchasers from hillmen at weekly markets, and, in *Kurnool*, the collection, other than tangedu and amroy, was made departmentally through Chenchus wherever possible.

(2) *Extraction of fodder.*

35. Pasture lands in Cocanada and Ramachendrapur taluks in *Gōdāvari Lower*, and collection of fodder grass from closed areas in *Kistna*, were leased out : removal of grass free in headloads in *Kurnool East, South and West*, and on permits for cartloads from four reserves in *Kurnool South*, and of thorns on payment in *Kurnool South*, were permitted.

(3) *Hay-making.*

36. Hay was collected departmentlly in *Kurnool South* for Government bulls ; elsewhere it was not resorted to for want of demand, or past experience, showed the undertaking unprofitable.

(4) *Grazing.*

37. The permit system was in force in all divisions. The revenue derived was Rs. 1,28,898 against Rs. 1,10,364 in the previous year, the increase was due to larger number of delta cattle taken to Rampa country in *Gōdāvari Lower*, *Guntūr* cattle to *Kurnool East*, and *Nizam's Dominions* cattle to *Kurnool West.*

(*b*) Agency of Exploitation.

(i) *Government.*

38. Forms 76 and 77 show separately the different classes of produce collected and Form 78 the stock disposed of and the balance remaining. The total quantity of timber and fuel, the number of bamboos and the value of minor produce extracted departmentally were 28·88 , 27·39 and 3·82 of their respective total outturn through all agencies, and the total value of disposals was Rs. 2,19,471 against Rs. 3,53,682 in the previous year. Transport was conducted by boat, rail, country carts and buffaloes.

The quantity of timber, fuel and bamboos extracted was 323,766 c.ft. 1,460,144 c.ft., and 4,046,737 against 370,195 c. ft. 4,007,005 c. ft., and 6,135,885 respectively in the previous year ; the fall is due to substitution of contract for departmental agency. Minor produce collected was 95,814 against 271,806 maunds in the previous year.

(ii) *Purchasers.*

39. There has been a very large expansion in the removals by purchasers under timber and firewood, by the engagement of contractors in place of departmental extraction ; but the number of bamboos extracted is less under both methods. The prepayment system was in force in *Gōdāvari Upper* for removal of produce for local consumption (Koyas and Reddies) from reserves, and from *Gōdāvari Lower* from unreserves and Rampa ; driftwood was sold in auction in both the districts.

(iii) & (iv) *Right and Privilege holders and Free grantees.*

40. The following statement shows the estimated quantity and value of produce removed under the above heads:—

Agency.	Timber.		Fuel.		Bamboos.		Minor produce.	Grazing.	Total.	Value in the previous year.
	Cubic feet.	Value.	Cubic feet.	Value.	Number.	Value.	Value.	Value.	Value.	
		Rs.		Rs.		Rs.	Rs.	Rs.	Rs.	Rs.
Right and privilege holders.	807	64	1,54,806	2,904	12,293	62	22,784	798	26,612	28,416
Free grantees	22,643	1,923	..	..	47,670	355	102	5	2,385	5,176

(*c*) Outturn and Sources of Forest produce.

Agency.	Timber in cubic feet including sandal-wood.		Fuel in cubic feet.		Bamboos in number.		Minor produce (including grass and grazing) gross value in rupees.	
	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.
1	2	3	4	5	6	7	8	9
Government	370,195	323,766	4,007,005	1,460,144	6,135,885	4,046,737	14,922	10,628
Purchasers (including confiscation).	637,198	1,225,178	1,112,102	2,991,914	13,927,560	10,668,814	265,593	243,732
Right holders	807	807	154,806	154,806	12,293	12,293	24,137	23,582
Free grantees	40,397	22,643	560	..	140,825	47,670	102	107
Total ..	1,048,597	1,572,394	5,274,473	4,606,864	20,216,563	14,775,514	3,04,754	2,78,049

41. The variations have been explained where necessary. The rates for grazing fees levied in the several districts are shown in Form 74. The number of animals licensed to grazing on permits was 644,555 against 570,607 in the previous year.

CHAPTER III.—FINANCIAL RESULTS.

42. The financial results of the Circle compared with those of last year and the average of the five preceding years show a net increase of Rs. 82,328 and Rs. 7,981 respectively.

—	1912-13.	1911-12.	Average of preceding five years.
	Rs.	Rs	Rs.
Revenue..	7,83,196	8,30,433	7,41,481
Expenditure—			
"A. Conservancy and Works" including "Refunds."	4,47,803	5,87,457	5,03,351
"B. Establishments"	3,97,182	3,87,093	3,07,900
Total expenditure ..	8,44,985	9,74,550	8,11,251
Net results ..	— 61,789	— 1,44,117	— 69,770

The gross receipts were less than those of the previous year and higher than the average by Rs. 47,237 and Rs. 41,715 respectively.

The A Expenditure is less than that of the previous year and the average by Rs. 1,39,654 and Rs. 55,548. The net results show a deficit of Rs. 61,789 which is due to large expenditure on works of improvement.

The above figures do not show the true working of the year as the revenue is solely interest on our capital whilst the expenditure under A "Conservancy and Works" show large amounts for "Capital" expenditure, and a true balance sheet should merely show the interest on that capital.

Working it out in this manner, the following results are far more accurate :—

			RS.
Total revenue for the Forest year ending with 30th June 1913			7,83,196
		RS.	
A "Conservancy and Works"		4,39,174	
Deduct all "Capital" expenditure as per details given below :—			
	RS.		
A VI-*c* Rs. 9,917 less 10 per cent. for repairs Rs. 992	8,925		
A VII-*a*	24,021		
A VII-*b* Rs. 30,682 less expenditure on petty works Rs. 5,838	24,844		
A VII-*c*	2,941		
A VIII-*a* Rs. 11,941 less establishment Rs. 504	11,437		
A VIII-*b*	828		
A VIII-*e* Rs. 75,627 less establishment Rs. 9,168	66,459		
A VIII-*f*	15,854		
A VIII-*g* Rs. 15,124 less establishment Rs. 4,608	10,516		
		1,65,825	
	Balance ...	2,73,349	
Add 4 per cent. interest on "Capital" expenditure of Rs. 1,65,825		6,633	
B "Establishments"		3,97,182	
			6,77,164
	Surplus ...		1,06,032

It will be seen herefrom that the *true* working of the year should not show the deficit of Rs. 61,789, but a surplus of Rs. 1,06,032 ; and to complain about a deficit on the recognised, but terribly mixed, mode of accounts, whilst our forests are still impoverished, is wrong.

The total receipts and expenditure for the year fell by 5·68 and 13·29 per cent. respectively.

About 45 per cent. of the expenditure was devoted to the upkeep and improvement of the forests and 55 per cent. to exploitation, etc. It will be observed that the value of timber and other produce at sale depots at the close of the year amounted to Rs. 30,542 which was Rs. 90,028 less than it was at the close of the previous year.

The outstanding revenue at the beginning of the year was Rs. 38,220 and the value of the sales amounted to Rs. 8,31,632. Out of the total of Rs. 8,69,853 Rs. 7,83,196 were collected, leaving an outstanding balance of Rs. 86,657 at the close of the year.

Receipts.

(i) *By Departmental Agency.*

Timber.—Rs. 17,857 due to abandoning the departmental operations and to the sale of previous year's stock in sale depots.

Fuel.—Rs. 71,414 due to leasing of coupes to contractors.

Bamboos.—Rs. 35,001 do. do.

Minor Produce.—Rs. 9,939 due to poor crop of tamarind, etc.

(ii) *By purchasers.*

Timber. + Rs. 42,195 due to larger removals from unreserves and from Ramna.

Fuel. + Rs. 41,276 due to introduction of the contract system.

Bamboos.—Rs. 2,826 due to less demand for bamboos for sugarcane cultivation.

Grazing and Fodder grass. + Rs. 18,534 due to large number of foreign cattle taken to the Nallamalais and Rampa.

Other produce.—Rs. 15,021 due to poor crop of tamarind and to fall in the tree-owners' fees.

(iii) *Miscellaneous (including confiscated drift and waif wood).*

Revenue.+Rs. 2,816 due to driftwood sales fetching more revenue, to sale of large quantities of timber confiscated in late Deputy Ranger Sundarēsa Ayyar's case and to more adjustments on account of steam launch "Thistle."

EXPENDITURE.

A. "*Conservancy and Works.*"

The total expenditure was less than that of the previous year by Rs. 1,40,863 and was due mainly (1) to the advance made in the introduction of contract system, (2) curtailment of road and building programmes in accordance with Government Orders, and (3) to less expenditure on cultural and fire protection operations.

B. "*Establishments.*"

The increased cost of Rs. 10,089 was due to the debiting of the pay and the travelling allowance of the Forest Settlement Officer, Vizianagram Estate, to this Circle, seemingly an unnecessary expenditure.

CHAPTER IV.—ADMINISTRATION.

43. *New District Forest office charges.*—There were no changes during the year. The *Central Gōdāvari* division has not yet been formed.

44. *New Ranges.*—One new Range called the Gudem range uniting all Chanchu gudems under one Ranger was formed in *Kurnool East.* In *Vizagapatam*, four reserves covering an area of 32·10 square miles were transferred from the Golugonda to the Sarvasidhi Range.

45. *Conduct of the Executive Establishment.*—The conduct of the executive staff is fairly satisfactory except in *Ganjām* and *Kurnool, South.*

Good conduct.—The work of Rangers Mir. Abdul Hussain Kirmani Sahib, Abdul Khalak Sheriff, M. Subrayulu Nāyudu, K. C. Belliappa, A. Kristna Rāo, R. Vīraswāmi Nāyudu, P. V. Subrāmayya, V. S. Subrahmanya Ayyar, J. D. David and K. P. Benjamin is specially commended.

Bad conduct.—Two Rangers and four Deputy Rangers were suspended and one Deputy Ranger was removed.

Protective staff.—The conduct of this branch still continues unsatisfactory on the whole. The arrangement of substituting for Guards and watchers, beats on practically an independent basis, by gangs of guards and watchers patrolling under a Deputy Ranger, taking his orders weekly from the Range officer, is under contemplation and being developed in some divisions; this will probably get rid of a large amount of abuse.

Prosecutions.—One ranger was prosecuted for falsification of accounts and misappropriation of Government money, but acquitted. He is under suspension pending departmental enquiry into certain charges framed against him by the District Forest officer. One Deputy Ranger, one Forest Guard, one Depot Gumastah and one Coupe Gumastah were prosecuted and convicted. Two Forest Guards in *Kistna* were prosecuted; but the case is still under enquiry.

Removals and minor punishments.—Sixteen Forest Guards were dismissed, 17 removed, 33 suspended and 8 reduced; whilst among other minor subordinates there were 7 dismissals, 21 removals, 43 suspensions and one reduction.

Foresters.—On the whole they are reported to have worked well; removals 3, suspensions 4 and reduction 1.

Ministerial establishment.—The conduct of the ministerial establishment was on the whole satisfactory. One Head clerk and one Accountant of the District Forest office were temporarily reduced. One Range clerk and one Range peon and one

District Forest office peon were dismissed. One Range clerk and two Range peons removed, and two Range peons and one District Forest office peon suspended.

46. *Health of establishment and casualties.*—The health of the establishment was even worse than usual in *Ganjām*, *Vizagapatam* (Golgonda range), *Gōdāvari Upper* and the *Kurnool Nallamalais*; and good in the remaining areas. One Draftsman, one Clerk, one Forester, one Plantation Overseer, six Forest Guards, three Watchers and one Tanadar died of malaria; one Forest Guard was invalidated. Several subordinates had to take leave on account of ill-health.

47. *Relations between Revenue and Forest officials.*—The relations between the Revenue and Forest officials were cordial in every district.

48. *Service books.*—These are maintained and verified in all the districts.

49. *Tours of the Forest Member.*—Nil.

Conservator's inspections.—Mr. A. W. Lushington was in charge of the circle throughout the year. Two hundred and thirty-two days were spent in camp by him. He visited all the districts and inspected all the District Forest offices.

Touring of the District Forest officers.—All the District Forest officers except of East Kurnool, spent more than six months in camp. The short touring of the Kurnool East District Forest officer was due to the change of officers, to the illness of Mr. Minchin and to his having been in charge of two divisions for about two months.

Inspection of Range offices.—All the range offices were inspected, except one in *Kurnool West.*

Audit of accounts of District Forest offices.—All the District Forest offices, except that of *Kistna*, were inspected by the Auditors from the Accountant-General's office, and the results were reported to be satisfactory.

50. *Imperial Forest College, Dehra Dun.*—Five returned with the higher standard certificate.

Four Government students were deputed to the Forest College at Coimbatore for the course commencing from 1st July 1913.

Vernacular Training School for Forest Guards.—The school was opened at Rudrawaram (*Kurnool, South*) on 1st February 1913 with Rangers N. S. Anantāchārlu and A. J. M. Snaize as instructors. Out of 8 Foresters and 22 Forest Guards deputed, one was suspended. Two Foresters and one Forest Guard obtained first, 4 Foresters and 9 Forest Guards second, and 2 Foresters and 11 Forest Guards third-class certificates.

51. *Work and service of superior officers.*—The following Collectors have commented on the work of their District Forest officers:—

Ganjām.—Mr. Bennett's work was excellent as usual. His intimate knowledge of the district and his tact in dealing with the khonds have frequently been brought to notice by me. There is no doubt that the comparative ease with which forest operations have been carried on in Pondakhol is chiefly due to his influence with the khonds. Mr. Thompson's work was satisfactory.

Vizagapatam.—The work of the District Forest officer was satisfactory.

Gōdāvari, Upper.—Mr. D. A. Stracey was in charge of the division from 12th November 1912, but after a short time he became subject to nervous prostration, and his work since February has been very unsatisfactory, being almost entirely confined to office.

Gōdāvari, Lower.—Mr. Seager worked very satisfactorily throughout the year and has done much to make the division more efficient. His office has much improved and the general tone amongst the subordinates seemed to be better throughout the division. He has toured constantly and taken much pains to introduce reforms.

Kurnool, East.—The work of Messrs. K. Aswatham Nāyudu, Minchin and Madan was satisfactory.

Kurnool, South.—The work of Mr. Barlow-Poole's successors, *i.e.*, Messrs. Minchin and Thompson was satisfactory.

Conservator's remarks.—It is with the deepest regret that the deaths of Mr. B. H. Barlow-Poole, Deputy Conservator and District Forest officer of *South Kurnool*, and of Mr. N. M. Rego, Extra Assistant Conservator and District Forest Officer of *Upper Gōdāvari*, must be recorded; whilst Mr. Āswatham Nayudu, Extra Assistant Conservator and District Forest Officer, *East Kurnool* became incapacitated and retired on medical certificate; and Messrs. Minchin, Assistant Conservator and District Forest Officer, *East Kurnool*, and Stracey, Extra Assistant Conservator and District Forest Officer, *Upper Gōdāvari* were forced to take leave. Another loss to the Circle is Mr. H. F. A. Wood, who after ten years' most excellent service in *West Kurnool* has since the close of the year, been transferred to Coimbatore; during his tenure of office there has been a regular revolution and transformation of administration in that division; the permit system abolished, grazing and fires far more under control, the Chenchus taken in hand and gradually (though by no means perfect yet) being transformed from murderous and thieving vagabonds to useful forest workers, and general operations from a state of chaos into a methodical system of working.

As regards other officers I agree generally with the remarks of the Collectors.

52. *List of Vernacular names of trees.*—This is now in the press, but the correction of proofs is a laborious work; it is hoped, however, to be completed shortly.

CHAPTER V.—GENERAL.

(*a*) Rules under the Forest Act.

53. (i) *Timber Transit rules.*—The rules worked well in all the districts. Amendments to the river transit rules reducing the number of checking stations on the Gōdāvari and simplifying the method of check were sanctioned towards the end of the year. The enforcement of the rule that printed permits should be procured for the removal of any timber from private lands in Nallakalva village, adjacent to the Nallamalais, had a wholesome effect, and illicit removals under cover of removals from darkhast lands were stopped.

(ii) *Rules under section 26 of the Forest Act.*—The privileges allowed by these rules were generally availed of by the people and there were no complaints nor abuses except in *Vizagapatam* and *Gōdāvari, Lower*. In *Vizagapatam*, seven cases were reported, of which one was convicted, three were compounded, two acquitted and one is still pending. In *Gōdāvari Lower*, the hillmen of the Polavaram range complained of the restriction placed on podu cultivation by prohibiting within one chain from the boundary of a reserved forest. This is under enquiry.

(iii) *Rules framed for the collection and disposal of drift wood.*—These rules continued to work smoothly.

(iv) *Rules for the guidance of the Forest officers in compounding forest offences.*—The rules are reported to have worked satisfactorily in all the districts.

(v) *Rules framed under the Forest Act for private forests.*—The Jeypore and Vizianagram rules worked fairly well, but some amendments, now under consideration, appear necessary; no complaints were received from the villagers residing in villages near the reserved areas. In Jeypore no new forests were notified during the year; but several proposals were under enquiry and some have since been submitted to the Board. In Salūr the rules were not brought into force during the year under report. In Madgole 87 square miles of the forests notified under section 29 are being demarcated.

(*b*) Supply of Forest produce to meet the wants of the people.

54. (i) *Development of the coupe and depot system.*—The permit is only used for grazing and minor produce in all the districts. A great advance has been made in the introduction of the contract system. In *Ganjām*, timber, fuel and bamboo coupes were sold standing to contractors. In *Vizagapatam*, coupes in convenient localities for the supply of fuel, timber and bamboos were worked. The permit system was in force in unreserved areas and, as regards the reserved forests, in respect of bamboos

only in the Dharakonda-Sanivaram Working-plan and in certain other coupes where the demand is purely local and small. In *Gōdāvari Upper*, the inhabitants of the Bhadrāchalam taluk are allowed the privilege of cutting and removing classified and unclassified timber from unreserves free of cost for domestic and agricultural purposes. The requirements of others are met by the issue of permits for produce from reserves on payment. In *Gōdāvari Lower*, all Government sale depots were closed, and the distribution and sale of forest produce were left in the hands of contractors to whom all the coupes, allotted for working during the year, were sold standing. In *Kistna*, all the sale depots were abolished, and coupes sold standing to contractors who opened depots in all the important towns. In *Kurnool East*, till the end of March 1913, the demand for timber and agricultural implements was met by departmental dead timber operations. Since April 1913 this work was practically stopped and the demand met from the 93 miles of boundary lines which are being cut far the Gudem range. Two bamboo coupes and two fuel coupes were leased out to contractors. In *Kurnool South*, the sale of spokes, felloes, ordinary timber, fuel and bamboos, collected by departmental agency in depots, was continued as in last year; besides, efforts were made to carry out similar work in coupes leased out to middlemen. One such coupe for timber and fuel in Sirvel Range and two coupes for bamboos in the Railway Working Circle Range were sold to contractors. Here for a few years it will be advisable to meet the demand for timber and fuel by supply from the cutting of new fire lines, or enlargement of existing lines, and endeavours are being made to give this cutting and removal on contract, when once those lines have been marked on the ground. Bamboo coupes will be sold to contractors, and, as the bamboos are in such excess that their removal is necessary for the improvement of forest growth, every endeavour is being made to get in every type of bamboo worker in such coupes, whether house-building, medara (basket work, etc)., splits, or remnants for charcoal. In *Kurnōol West*, fuel is sold in coupes, and that for the supply of Kurnool town was given on contract according to which the contractor purchased fuel in the Musalimadugu and Bairluti coupes and small timber from the latter coupe. The contractor was not regular in payment and did not get his agreement registered, though it is more than a year since he entered into the contract. He would not buy the 6,000 stacks in accordance with his contract. It was therefore decided to cancel the contract and to sell the fuel and small timber in the coupes to any one that wants them. The monthly auctions of timber in forest coupes, instituted last year, have become popular. One coupe in the Yerramalais was sold standing to a contractor in December 1912; but it was found that the trees were not cut properly flush with the ground. Bamboos were sold in blocks in the Pecheruvu, Velgode and Atmakur Ranges.

55. *Free removal of grass.*—Free removal of grass was permitted in *Vizagapatam*, *Gōdāvari Lower*, *Kistna* and in *three Kurnools*. The concession was freely taken advantage of by the ryots in the *three Kurnools* and was not abused except in the Gadidemadugu reserve, where the ryots broke down the wall in the reserve.

56. *Measures adopted to encourage the growth of manure-leaf-yielding plants.*—Nothing was done in this direction, with reference to paragraph 8 of Government Order No. 564, Revenue, dated 25th February 1913.

57. *Hill tribes.*—In *Ganjām*, the assistance of practically all Khond villagers situated in or near the reserves in Gumsur was enlisted in fire protection as well as in general protection of the forests. Khond villages in Gumsur received concessions in the shape of ploughs, timber, bamboos, thatching grass for repairing their houses, minor forest produce and dry fuel. The concessions granted to six Khond villages were cancelled for failing to protect the forest near their villages from fire and theft. The Pondakhol Khonds worked well on fire protection, road and building works. The villages that showed special interest in the matter of putting out fires were given rewards of rice. The Chokkapad Khonds have so far refused to do the grubbing out of the roots on the demarcation lines; but this is probably due to the bad feeling existing between the Range officer and practically all his subordinates. In *Vizagapatam*, care was taken to avoid giving the hillmen cause for complaint against the working of forest laws, so long as they did not abuse the privileges given to them. In *Gōdāvari Upper*, the Koyas and Reddis continued to do

very little in fire tracing; it was found that insufficient touch between the departmental officers and the Koyas existed; but hereafter every inducement to do forest works, such as demarcation, fire-protection, etc., will be offered. In *Gōdāvari Lower*, the Koyas and Reddis in the Agency tracts continued to be indifferent in the matter of helping the department even in fire-protection and it is under consideration to make the concessions such as free grazing, etc., allowed to them in the reserved forests conditional on their helping the department specially in fire-protection In *Kurnool East*, the Chenchus rendered much assistance in putting out fires, and were employed in plantations and in collecting minor produce. Since April 1913 nearly all the able bodied males are engaged in cutting the boundary lines of the Gudem range. Many are employed as fire patrols, and in this capacity they are more useful than outside villagers. The scheme of departmental collection of ippa flowers is liked by the Chenchus. The several Chenchu gudems were brought under the jurisdiction of a single Ranger, so that all may be subjected to an uniform treatment, which, it is hoped, will improve their condition a good deal. Efforts are being made to start a school at Garapenta for the education of the Chenchu children, a doubtfully wise policy at this stage. In *Kurnool, South*, the Chenchus were employed on plantation works at Ahobilam. A scheme for employing the Chenchus in other directions chiefly in fire-protection of the track between the two Ahobilam temples (7 miles apart) and the loop line round upper Ahobilam gorge, and in the non-fire season weeding the bamboo areas on the Gundlabrahmeswaram principle referred to in Chapter II (4-*d*, ii-*d*), is at present under consideration. In *Kurnool West*, the concessions allowed to the Chenchus were fully enjoyed. They were, as usual, employed on the plantation works, collection of minor forest produce and fire-protection. A reward of Rs. 200 was paid to the Chenchus of Sudem, Pungidi and Rudracode for protecting the forests from fire. This has had a very good effect; and the concession of collection of ippa flowers under departmental supervision, and of distilling arrack therefrom, allowed to the Chenchus continued during the year and was carried out properly in all but the Atmakūr range where stringent measures will be taken to make the Chenchus obey the orders. There is one gudem in this Atmakūr range, *outside* the forests, Indiraswaram by name, which sets a bad example to all the rest, and is encouraged in its misbehaviour by the adjoining villages; some drastic steps seem called for here.

58. *Cultivation in reserved forests.*—No cultivation was allowed in reserved forests in *Gōdāvari Upper* and *Lower*, *Kistna* and *Kurnool South*. In *Ganjām*, cultivation was allowed in a few villages in Pondakhol, where working boundaries were cut. In *Vizagapatam*, the lease of 50 acres in the Chintapalle reserve to one Korapu Chitukulu was renewed. In *Kurnool East*, 105 acres of land in the Markapur reserve of Rachakonda Range was assigned to the Chenchus of Garapenta and Chennapalempenta, for dry cultivation on an annual assessment of As. 2 per acre, in previous years on the condition that they render all possible assistance in stopping fires in the neighbouring forests. In *Kurnool West*, the lease of two plots of lands measuring 42 and 32 acres in extent to some Christians of Gadithamadugu village in the Gadithamadugu reserve at As. 8 per acre were renewed.

59. *Mining and prospecting.*—In *Kurnool South*, Messrs. Khan Bahadur Waljee Laljee Sait and E. P. Stranach applied to surrender the lease granted to them for prospecting diamonds in the Dhone taluk. The Government have approved the issue of a mining lease for diamonds to Mr. Ghose over the whole of Ramavaram reserve. In *Kurnool West*, Mr. A. Ghose continued prospecting for steatite, galena and diamonds in the Yerramalais. Messrs. Beardsell & Co. are prospecting for barytes near Betamcherla. A mining lease for 30 years in favour of both Messrs. Ghose and C. Jamlian of Paris for steatite and magnesite was approved by the Government. Four licenses for prospecting diamonds in the Dhone taluk were also granted to Mr. A. N Pestonjames of Bombay.

60. *Realization of revenue from the usufruct of toddy-yielding trees on Government Waste and poramboke lands.*—The chief revenue was realized in *Ganjām* (Rs. 1,014), in *Gōdāvari Lower* (Rs. 4,564), *Kistna* (Rs. 10,458), *Kurnool East* (Rs. 1,493), *Kurnool South* (Rs. 2,597) and *Kurnool West* (Rs. 16,000).

(*c*) LIVE AND DEAD STOCK.

61. *Live stock*-(*a*) *Elephants.*—All the elephants in *Ganjām*, *Vizagapatam*, *Gōdāvari Upper*, and *Kurnool West* were in good condition. The second elephant for the *Upper Gōdāvari* has not yet been purchased. (*b*) *Buffaloes and bullocks.*—The condition of the two buffaloes in *Ganjām* was good. In *Kurnool South*, out of 34 bullocks, two were destroyed being unfit for work.

Inventory of valuable stock.—The stock registers were maintained and verified in all the districts.

Rain-gauges.—Rain-gauges were set up in all the districts and the readings were properly recorded—*vide* Appendix D.

(*d*) SUITS.

62. *Suits.*—In *Gōdāvari Lower*, appeal to the Privy Council in the Coringa extension suit remains to be preferred, copies of records not being ready. A contractor of Rajahmundry filed a suit in the District Court for the recovery of about Rs. 4,000 in a driftwood case. In *Kurnool West*, the pauper suit instituted by contractor Azam Sahib for Rs. 5,444 for work done by him on the Sudem channel is still pending.

OFFICE OF THE CONSERVATOR OF FORESTS,
NORTHERN CIRCLE,
WALTAIR, 9*th September* 1913.

A. W. LUSHINGTON,
Conservator of Forests, Northern Circle.

INDEX.

FOREST ADMINISTRATION REPORT,

MADRAS PRESIDENCY,

CENTRAL CIRCLE, 1912–1913.

Chapter.	Subject.	Paras.
I	Constitution of State forests—	
	1. Alteration in area	1
	2. Forest settlement	2
	3. Demarcation	3
	4. Forest surveys	4 & 5
II	Management of State forests—	
	1. Regulation of management—	
	(*a*) Preparation and control of working-plans	6 & 7
	(*b*) Annual plan of operations	8
	2. Communications and buildings—	9
	(*a*) Roads and bridges	10
	(*b*) Buildings	11
	(*c*) Miscellaneous...	12
	3. Protection of forests—	
	(*a*) General protection	13 to 15
	(*b*) Protection from fire	16
	(*c*) Protection from cattle	17
	(*d*) Protection against injuries from natural causes	18
	4. Sylviculture—	
	(*a*) Natural reproduction	19
	(*b*) Artificial reproduction	20
	(*c*) Operations for the improvement of the growing stock ...	21
	(*d*) Experiments on species	22
	5. Exploitation—	
	(*a*) System of management—	
	(i) Major forest produce (Sylvicultural systems) ...	23
	(ii) Minor forest produce	24 to 28
	(*b*) Agency of exploitation	29
	(i) Departmental agency	30
	(ii) By purchasers	31
	(iii) Rights and privileges	32
	(iv) Free grants	33
	(*c*) Outturn and sources of forest produce	34
III	Financial results	35
IV	Administration	36 to 51
V	General	52 to 64
	Appendices A to E and Annual Forms Nos. 65 to 85	

FOREST ADMINISTRATION REPORT OF THE CENTRAL CIRCLE

FOR THE

FOREST YEAR ENDING 30TH JUNE 1913.

CHAPTER I.—CONSTITUTION OF STATE FORESTS.

1. Alteration in Area.

Reserved Forests.—The following are the variations :—4,086 acres were added by correct computation of areas, 73 acres by transfer from Reserved Lands and 7,184 acres were deducted by disafforestation and revision of areas. The net area of Reserved Forests of the Circle was 5,794 square miles at the close of the year.

Reserved lands.—Fifty-five acres of small areas consisting of enclosures and additions to existing reserves were newly constituted. Seventy-three acres were transferred to reserved forests, 150 acres were excluded at settlement, and 620 acres notified as reserved lands under Section 26 were cancelled by the Collector of Cuddapah (North). The balance remaining at the close of the year was 75 square miles including the leased forests.

2. Forest Settlement.

2. Of the areas that remained to be constituted at the beginning of the year, six small additions (73 acres) which formed enclosures or additions within the existing reserved forests in *Anantapur* and *Chittoor* were finally settled, and the settlement of five blocks (12 square miles) completed leaving incomplete three blocks in *Bellary*, *Anantapur* and *Chittoor* and two enclosures in *Chingleput* all less than a square mile in extent. The initial notification for addition to Utukur Varini block was cancelled after the close of the year.

3. Demarcation.

3. Sixteen miles of external demarcation were carried out in *Anantapur*, *East Cuddapah*, and *Chittoor* at a cost of Rs. 121 or at an average rate of Rs. 7-9-0 per mile. Re-clearing, repairing and re-building cairns with stone slabs and putting up notice boards as required by Board's Proceedings Forest No. 1175, Mis., dated 5th August 1912, were also undertaken in these and other districts.

Permanent demarcation of reserves in the Circle is capable of much improvement and the matter is receiving attention.

4. Forest Surveys.

(*a*) *By Survey of India.*

4. The Survey of India Party did not work in this Circle during the year.

(*b*) *By Departmental Surveys.*

5. Under departmental surveys the work done by specially employed surveyors consisted chiefly in checking and verifying boundaries of existing reserves and in surveying coupes to be leased out.

CHAPTER II.—MANAGEMENT OF STATE FORESTS.

1. Regulation of Management.

(*a*) *Preparation and Control of Working Plans.*

6. *Preparation.*—In *Nellore*, the working plan for the Kottapatam Reserved Forests was sanctioned by the Board and that for Tammenapatam Extension Casuarina plantations was returned in view of the recent policy of Government in regard to Casuarina plantations. The working plan for Nellore range was received after close of the year.

In *Chittoor*, a preliminary working plan for the forests in the Vayalpad and Madanapalle ranges was sanctioned in part pending the orders of Government on the proposals of the Forest Committee.

In *East Cuddapah*, a preliminary working plan for the Palakonda Timber Working Circles which was submitted to Board was withdrawn owing to a change in the system of working timber areas.

A draft working plan received from *North Cuddapah* had to be returned for the same reasons.

7. *Control.*—Control is improving but much still remains to be done, and many of the existing working plans need thorough revision.

The principal deviations were :—

In *Bellary*, cultural operations were not undertaken on a large scale in Adōni, Alur and Bellary ranges as the operations of the previous years proved a total failure. In Harpanahalli range, formation of inspection paths and cultural operations were not completed owing to arrears of previous years works and the fellings prescribed were not carried out as there was no demand.

In *Anantapur*, regeneration works were given up as useless.

In *North Cuddapah*, some coupes were not worked for want of demand and owing to non-completion of previous year's coupes.

In *East Cuddapah*, several coupes were not worked on account of arrear coupes that remained to be felled from previous years. The system of working timber areas has been altered and small areas will be treated under the improvement felling system in future. Working of Sidhout series was suspended for three years. Existing working plans laid down provisions which have proved impossible to carry out in practice under present circumstances. Hence the necessity for change of system.

In *Chingleput*, some coupes were not sold for want of offers.

Generally, the revision of working plans is held in abeyance pending receipt of orders of Government on the proposals of the Forest Committee.

(*b*) *Annual Plan of Operations.*

8. The sanctioned plan was generally adhered to ; the chief deviations were the following :—

In *Bellary*, the reconstruction of subordinates' lines near Adōni was not undertaken owing to delay in the acquisition of the site ; inspection paths in Alur range were not constructed pending orders of Government on the question of abandonment of the reserves concerned. In Harpanahalli range the construction of an inspection path and out-houses for Range office, and cultural operations were not carried out.

In *Guntūr*, the Range office and quarters at Macherla had to be postponed and wells were not constructed pending orders of Government on the Forest Committee's report.

In *North Cuddapah*, certain coupes were not sold for want of demand ; road and building works were postponed for want of adequate staff. Minor produce was worked departmentally owing to very low bids obtained at auction sales.

In *East Cuddapah*, minor produce was not sold on account of very low offers at auction sales.

2. Communications and Buildings.

In *Nellore*, the construction of range camp sheds in three places was given up as unnecessary, and the combined range office and quarters at Kavali and compound wall to the range office at Kanigiri were postponed. In their place the range office at Dachur was taken up, being deemed more urgent.

In *Chittoor*, the repairs of certain roads were postponed to provide funds for more urgent works.

9. The outlay on communications and buildings is compared below :—

	1911-12.	1912-13.
	Rs.	Rs.
Roads and bridges	4,473	14,271
Buildings	53,534	51,816
Other works	7,845	3,897

The increase was only under Roads and Bridges mainly in *Bellary*, *Anantapur* and *North* and *East Cuddapah* The increased expenditure on roads is satisfactory and a great deal remains to be done in the future if the forests of the circle are to be properly opened out for working.

The important works were—

(*a*) *Roads and Bridges.*

10. In *Bellary*, formation of an inspection path in Harpanahalli range and a cart-track from Copper Mountains Bungalow to Siddapuram.

In *Anantapur*, roads from Amagondapalayam to Vanavole 3 miles and from Bukkapatnam to Siddarampuram 9 miles were constructed.

In *North Cuddapah*, some bridle paths and cart tracks were constructed.

In *East Cuddapah*, opening of bridle paths from Mogilipenta to Papanasam 5 miles and from Erranetibundalu to Papanasam and 2 cart tracks in Thummalabylu.

In *Chittoor*, construction of Erravaripalem Nerabylu Road—4 miles and repair of a cart track from Nellipatla to Kolamasanapally $6\frac{1}{2}$ miles and road from Nellipatla rest house to reserved forest $1\frac{1}{2}$ miles.

Tramways.—In Sriharikota 8,749 tons and in Coast range 5,257 tons of fuel were trammed against 5,660 and 4,752 tons respectively in the previous year.

(*b*) *Buildings.*

11. In *Bellary*, construction of inspection bungalows at Antapuram and Gudikota are still in progress and combined range office and quarters at Harpanahalli and Hospet were completed, subordinates' lines in Adōni range remain incomplete.

In *Anantapur*, construction of bungalows at Nagasamudram and Ramagiri were completed and those at Marutla and Siddarampuram commenced.

In *Guntūr*, construction of Venkatayapalem bungalow and a camp shed at Gavinivaripalem are in progress.

In *North Cuddapah*, construction of rest-house at Chinnaletibhavi and out-houses to Bynapalle and Idupulapaya bungalows was completed.

In *East Cuddapah*, construction of a rest-house at Obalum was completed; subordinates' lines in Kodur and Rajampet ranges are in progress.

In *Nellore*, rest-house at Gonupalle and out-houses to Kothachenu rest house and subordinates' lines at Kothachenu were completed. Good progress was also made in the construction of Range officer's quarters and subordinates' quarters at Kothachenu and range quarters at Kanigiri.

In *Chingleput*, the extension of Kambakkam Hill bungalow was completed.

In *Chittoor*, the rest-house at Panapakkam was completed. Construction of quarters for a Deputy Ranger at Mamandur is in progress. The Chittoor range office was also improved.

The progress in buildings is satisfactory but much still remains to be done. Without roads and proper buildings in the way of subordinates' lines and rest houses, the proper inspection, protection, and working of the forests is almost impossible. Expenditure sensibly invested on such works within the Circle will well repay itself in a few years time. Having due regard to progress and improved efficiency of working it is not possible to advocate any serious curtailment of expenditure at present under either of these important heads.

(*c*) *Miscellaneous.*

12. New wells were sunk and old wells repaired in all districts.

Construction of rubble dams and deepening of salt creeks for the transport of fuel were done in *Guntür*.

In *Anantapur* about 30 miles of stone walls around closed compartments were constructed.

In *Chingleput* nearly half the total length of the Guindy Park Reserve was fenced with substantial stone pillars placed at intervals of 20 feet with 5 strands of galvanized wire.

3. Protection of Forests.

(*a*) *General Protection.*

13. The following statement shows the number and classification of forest offences compared with the previous year:—

Class.	Injury to forests by fire.		Unauthorised felling or appropriation of wood and minor forest produce.		Grazing without permission or in tracts in which grazing is prohibited.		Other offences.		Total	
	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.
1. Cases taken into court,	9	11	1,025	1,071	683	766	61	82	1,778	1,930
2. Cases compounded .	20	5	4,109	4,314	2,547	2,834	131	189	6,807	7,342
3. Cases undetected ..	298	267	187	176	320	122	2	1	807	566
Total ..	327	283	5,321	5,561	3,550	3,722	194	272	9,392	9,838

There is a small increase under all heads except fires. The decrease in fires is chiefly in *Chittoor* and is reported to be due to closure of certain reserves to grazing on account of heavy fires last year. Under "Unauthorized felling" there was a fall chiefly in *Nellore* and *Chittoor* which is attributed to favourable season, but it was counterbalanced by an increase in *Bellary* stated to be due to better supervision and in *East Cuddapah* due to formation of two additional ranges resulting in closer supervision and partly due to the presence of the Vernacular Training school for five months in the year, the students of which detected 26 cases. The increase in *Chingleput* is reported to be due to preparation of separate offence reports for each individual where more than one offender was apprehended in one place and at one time. The increase under grazing occurred in all the districts except *Anantapur Nellore* and *Chittoor* where the decrease is attributed to favourable season.

Of 2,069 cases taken to court, 1,769 were convicted and 300 acquitted against 1,649 and 301, respectively.

The percentage of failure is 14·50 against 15·37 of last year.

14. *Cases compounded.*—Six thousand six hundred and fifty-three cases were compounded for Rs. 66,515 against 5,976 cases for Rs. 53,029 last year. The average amount per case is slightly higher than that of last year. The punishments awarded by the Magistrate are reported to be adequate. A case of some importance occurred in *East Cuddapah* in which 1,000 goats were seized while browsing When the goats were being driven to cattle pound they were rescued and the forest subordinates severely assaulted and the accused persons were convicted by the Deputy Magistrate

and an appeal is now pending with the Sessions Judge. Rewards were sparingly granted in all the districts except *Bellary* and *Chingleput*.

15. *Rules for the guidance of Forest officers in compounding offences.*

A precis of the district reports is appended below :-

Bellary.—The rules laid down in G.O. No. 1990, Revenue, dated 13th June 1910, have been followed. The District Forest Officer is of opinion that the maximum fee fixed is low.

Anantapur.—The rules have worked satisfactorily, but no real improvement in conservancy can be expected until the underpaid subordinates are replaced by a properly organized permanent staff on pay commensurate with their temptations, etc.

Guntūr.—The working of the new rules has been satisfactory. The maximum fines were seldom or ever inflicted.

North Cuddapah.—The rules have been carefully followed and in no case was the maximum limit exceeded.

Nellore.—The orders regarding maximum rate were attended to.

Chingleput.—The orders had no particular effect during the year as the rates fixed are at least as high as those usually levied before the introduction of the order.

Chittoor.—The rules were followed and are reported to have worked fairly satisfactorily.

(*b*) *Protection from Fire.*

16. The system of fire protection was the same as in previous years.

Special protection.—The area attempted to be protected during the year was 1,908 square miles against 1,866 in the previous year and the area burnt was 121 square miles against 191 square miles in the previous year.

The area successfully protected was 1,787 square miles against 1,675 square miles in the previous year. The percentage of area protected rose from 89·7 to 93·6 during the year.

The cost per square mile of successfully protected area rose from Rs. 12-6-0 to Rs. 14-7-5 and the increase is due to additional area attempted to be protected and to the widening of fire lines at an increased cost both in *North* and *East Cuddapah* divisions.

The origin of fires is given in Appendix D.

The system of burning large areas of forests in strips of varying width in order to secure protection to the remainder was discontinued both in *North* and *East Cuddapah*, and it is not proposed to resort to it again.

(*c*) *Protection from Cattle.*

17. The area closed and open to grazing is shown in statement 73 which shows that 5,493 square miles were closed to goats.

An analysis of the cattle impounded during the year with the average of the three years is given in Appendix E.

The increase in *Bellary* is stated to be due to better supervision and in *Nellore*, to stricter protection of the closed areas.

(*d*) *Protection against injuries from natural causes.*

18. *Lantana*.—The encroachment of lantana in Ramandrug in *Bellary* district and Horsleykonda in *Chittoor* continues to receive attention. In *Guntūr* casuarina saplings were uprooted and washed away by erosion of sea in the Sooryalanka plantation and several plants died on account of hot weather. These plants were replaced. In Sattenapalle range, Yepi (*Hardwickia binata*) trees were attacked by caterpillars during the rainy season and considerable damage was done to the leaves but the trees recovered subsequently.

4. Sylviculture.

(*a*) *Natural reproduction.*

19. In *Bellary*, seedling reproduction of Red Sanders (*Pterocarpus santalinus*), *Bassia longifolia*, *Ixora parviflora*, *Diospyros Chloroxylon*, *Cassia Fistula* and *Dolichandrone crispa* was fair in some reserves. Sandal is spreading in Ramandrug. The coppice growth in felled coupes was very satisfactory. In some reserves natural reproduction of *Melia indica*, *Chloroxylon Swietenia* and *Dolichandrone crispa* was fair. In *Anantapur*, natural reproduction was good in places where there was shade. The reproduction of *Hardwickia binata* was good in the grassy open areas of Muchukota reserve and of *Melia indica* wherever thorny shrub protected it against grazing. In *Guntūr*, owing to heavy grazing regeneration is bad, but coppice was good in the babul working circle and fair in most of the areas felled. Reproduction of Mada (*Avicennia officinalis*) by seed was good in the Mangrove swamps. Natural reproduction of Red Sanders both from seed and coppice was excellent both in *North and East Cuddapah* divisions as in last year. In the former, coppice growth of Red Sanders is said to be very vigorous and seedlings of one year old in a felled fuel coupe measured on an average 7 feet. In *East Cuddapah*, seedling reproduction of *Chloroxylon Swietenia*, *Anogeissus latifolia*, *Terminalia tomentosa*, *Dolichandrone crispa*, *Hardwickia binata*, *Eugenia alternifolia*, *Shorea* and *Acacia Sundra* was satisfactory. In *Nellore*, regeneration both from seed and coppice was good in all the felled coupes and along natural streams. In *Chingleput*, reproduction from coppice was fair in all the closed coupes and natural seedlings of Red Sanders, Shorea Tumbuggaia and other species are found on the plateaus and slopes of hill reserves. In *Chittoor*, natural reproduction by seed was not very successful but was satisfactory in closed areas and in places where there was shade. Sandalwood seeded well but the seedlings either died back or were destroyed by cattle. Reproduction by coppice has been very good in all the recently felled coupes. Natural reproduction of *Pterocarpus Marsupium* and *santalinus*, *Dalbergia latifolia* was satisfactory.

(*b*) *Artificial reproduction.*

20. Form 75 shows the areas under plantations and topes, or subject to cultural operations. It has been decided that the casuarina plantations belonging to the department shall be sold and made over to private agency. Steps are now being taken to carry out this order. It will be necessary however to proceed cautiously so that Government may realise as near the full value of the plantations as possible.

Regular plantations.—In *Bellary*, the Moka plantation was extended by 89 acres but owing to failure of water in wells, only 18 acres were maintained. Seedlings of *Dalbergia Sissoo* and *Albizzia Lebbek* and cuttings of the former were planted and casualities in the previous year's planting supplied by cuttings of Sissoo. In *Guntūr*, 549 acres were planted with casuarina with an admixture of broad leaved species especially of Sissoo. In *North Cuddapah* and *Chingleput* nothing was done excepting watering the existing plants while in *East Cuddapah* 50 acres were sown with sandalwood seeds and subordinates dibbled seeds in several small areas.

Cultural operations.—A certain amount of these were carried out, but it has been decided to curtail such operations to a minimum in future. The results hitherto obtained are not at all commensurate with the expenditure incurred, and such experiments will, for the future, be limited to very small areas to which almost absolute protection can be afforded. Prospects of sandalwood extension are good both in *Chittoor* and *Anantapur* districts. In *Bellary*, very good results were obtained by heavy ploughing and levelling black cotton soil and various kinds of seeds were sown in furrowed lines 6′ and 18′ apart. Mound sowings were continued and only part of the area sown with different species of seeds and the seedlings are doing well. In *Anantapur* sandal was dibbled in two compartments and *Melia indica* and *Albizzia Lebbek* were regenerated on the trench and mound system and so far seedlings have come out successfully and are 15 to 18″ high. In *Guntūr* seeds of babul, *Melia indica* and *Cassia auriculata* were sown in the felled areas of the Guntūr Babul Working Circle but only babul germinated. *Hardwickia binata*, *Albizzia amara*, etc., seeds were sown in various coupes. They germinated freely but died subsequently owing to drought. In *North* and *East Cuddapah*, the operation was a thorough failure

on account of the severe drought, the method being mound sowing and dibbling. In *Chingleput*, 1,376 acres in felled coupes and in poorly stocked areas are said to have been ploughed and seeds of various species were either sown or dibbled in holes under bushes. The results of the previous year's sowings are not very encouraging. Mound sowings were carried out in the abandoned fields of a reserve, but the results are not yet apparent. In *Chittoor*, the season was a very trying one and only a fair proportion of the plants put on mounds have survived. Sandal seeds dibbled experimentally in Palmanēr range are said to be promising.

(*c*) *Operations for the Improvement of the Growing Stock.*

21. *Improvement fellings.*—In *East Cuddapah* three coupes have been marked out for improvement fellings in Seshachellams under a change of system sanctioned in Board's Proceedings, Forest Mis. No. 641, dated 6th June 1913.

In *Chittoor* improvement fellings in timber coupes of Mamandur and Chamala were undertaken and efforts made to check the spread of the growth of *Dalbergia paniculata*. With regard to these improvement fellings enquiry is now being made, as if they are similar to what has been going on in the neighbouring district of Cuddapah, a change of system is certainly called for.

Thinnings.—In *Nellore* 6,700 casuarina trees planted as nurses in 1906 and 1907 for the broad leaved species in 50 acres of the Kollurpad plantation were removed.

Creeper cutting is reported to have been carried out in almost all the districts of the Circle; and prickly-pear in *East Cuddapah* and in the Guindy Park and Meyyur plantation of *Chingleput* was removed.

Fencing.—In *Bellary* fencing was done in Adōni and Alūr ranges and existing fences repaired in Bellary range and milk hedge (*Euphorbia Tirucalli*) was planted in Harpanahalli range.

In *Anantapur* stone-walling closed compartments has been carried out.

In *Chittoor* fencing with thorns was done to protect the seedlings and coppice shoots from cattle.

In *Nellore* the fencing of old coupes was done departmentally and of new coupes by contractors.

Bunding of streams.—This apparently was done in Bellary, Adōni, Alūr, Hospet and Rayadrug ranges but majority of the bunds have been washed away. This is because the operations were not conducted properly under sensible supervision and the bunds were constructed low down the streams instead of commencing at the very source as ordered. In *Chittoor* the bunding of streams in reserves was continued in Palmaner and Chittoor reserves.

(*d*) *Experiments on Species.*

22. *Sandal.*—In *East Cuddapah* seeds were sown in some areas and in others dibbled but they have not germinated yet.

Swietenia Mahogani.—In *East Cuddapah* and *Nellore* the old plants are reported to be doing well, while those in Whiteside's Garden and Chittoor reserves are reported to be not promising.

Swietenia Macrophylla.—In *East Cuddapah* and *Nellore* the old plants are said to be healthy and luxuriant.

Acacia auriculiformis.—Twenty-three plants in *North Cuddapah* are thriving. In *Nellore*, this species does very well when mixed with casuarina in the poor sandy soil of Sriharikōta.

Eucalyptus Globulus.—In *Chittoor*, the trees in the Palmaner range are said to be thriving fairly well but the growth of those in *North Cuddapah* are not satisfactory. This tree is not at all likely to do well in either of these districts. In *Nellore*, *E. rostrata* and five other species raised from seed in 1910 in Kollurpad plantation are said to be establishing themselves.

Catalapa Speciosa.—The seven plants referred to in last year's report as surviving in Moka plantation, in *Bellary*, died.

Sesbania aculeata.—Experiments with this have now been stopped.

5. Exploitation.

(*a*) System of Management.

(i) *Major Forest Produce.*

23. The various sylvicultural systems in force in each district are given in the subjoined table :—

—	Bellary.	Anantapur.	Guntūr.	North Cuddapah.	East Cuddapah.	Nellore.	Chingleput.	Chittoor.	Total.	Percentage of total area under each sylvicultural system
	SQ. M.	SQ. M.	SQ. M.	SQ. M.	SQ. M.	SQ. M.	SQ. M.	SQ. M.	SQ. M.	
1. Method of clear felling by compartments	22	..	1	..	..	9	..	..	32	3·0
2. Uniform method	..	..	..	..	..	..	..	..	..	..
3. Group method	..	..	..	..	..	..	..	..	..	
4. Selection method	..	..	1	50	228	..	..	..	279	25·9
5. Simple coppice	9	..	2	..	..	..	..	..	11	1·0
6. Coppice with standards.	12 (*a*) 216	131	2	87	109	186	3	2	748	69·3
7. Method of improvement fellings	..	7	..	..	..	(*a*) 1	..	1	9	·8
Total ..	259	138	6	137	337	196	3	3	1,079	100·0

(*a*) Included in the forests for which working-plans have been prepared but not subjected to any definite system of working.

It is thus clear that the coppice with standards is the principle method of working in this Circle.

(ii) *Minor Forest Produce.*

(1) *Miscellaneous Produce.*

24. Minor produce was generally leased out in all districts except in some reserves in *North* and *East Cuddapah* where the offer was very low and one range in *Nellore* and *Chittoor*.

Permits continued to be issued for stone, earth and road materials.

(2) *Extraction of Fodder.*

25. In *Bellary* Mr. Howes cut and removed 100 tons of grass and the Military Department 839 tons during the year. In *Guntūr* the grass was leased out in some reserves and permits issued in others.

In *North Cuddapah* the grass was leased out in some reserves.

26. *Free removal of grass* —Complete information was not furnished under this head in spite of attention drawn to orders on the subject.

In *Bellary* free removal of grass was allowed in closed portions where the grass was unmarketable. The areas thrown open are 47,290 acres, but there is no record of the quantity so removed. In Harpanahalli range there were three cases of abuse two of which were compounded and the accused in the other was warned. In others the grass was sold on permits or leased out.

In *Anantapur* free removal of grass was allowed in all the reserves except those under cultural operations and the concession was withdrawn in the case of two villages where the people did not assist the Department when a fire broke out. Five hundred tons of grass are reported to have been removed.

In *North Cuddapah* free removal of fodder and thatch grass was permitted in several reserves and 2,500 cart-loads of grass were removed.

In *East Cuddapah* free removal was allowed in all the reserves except where hay operations were undertaken. Seven thousand tons of grass are reported to have been removed free. This can only be a very rough estimate.

In *Nellore and Chingleput* no free removal was allowed as there was no demand.

In *Chittoor* removal of grass in head-loads was allowed as usual.

(3) *Hay-making.*

27. The Departmental operations ordered in Government Order No. 1377, Revenue, dated 7th May 1912, are being conducted in *Guntūr* and *East Cuddapah.* In the former, 223 tons were made and the quantity sold was 300 tons including the stock of previous years. In the latter about 232 tons were made and 192 tons were sold. Report will be submitted in due course.

(4) *Grazing.*

28. The revenue realized during the year was Rs. 2,60,729 against Rs. 2,49,836 of the previous year.

There was decrease in *North* and *East Cuddapah* and *Chittoor* and increase in other districts.

The decrease is attributed to closure of larger areas this year, to non-advent of foreign cattle, to reduction of areas for goat browsing and to unfavourable season.

The increase in *Guntūr* and *Nellore* was due to large areas open to grazing and also under the Kancha system in the latter district, and in *Bellary* and *Chingleput* to favourable season. No explanation has been given for *Anantapur.*

(*b*) Agency of Exploitation.

29. Departmental agency has been abolished in all the districts except in very few reserves of *North* and *East Cuddapah* and *Chittoor.*

(i) *Departmental Agency.*

30. *Timber.*—The decrease is due to restricted fellings in *Bellary*, lack of demand in *Guntūr* and to the temporary stopping of felling Red Sanders in *Chittoor.*

Fuel.—The decrease is due to the great progress made in extending the contract system throughout the Circle.

Bamboos.—No regular departmental operations were undertaken except for building purposes in *Bellary* and *East Cuddapah.* In *Chittoor* it was leased out.

Minor produce.—The increase is due chiefly to departmental hay-making operations in *Guntūr* and *East Cuddapah.*

(ii) *By purchasers.*

31. (*a*) *Timber.*—The increase is due to large sale of trees on darkhast lands.
(*b*) *Fuel.*—The increase is due to extension of contract system.
(*c*) *Bamboos.*—The increase is due to the same cause.

Minor produce.—The increase is due to keen competition among tangedu bark (*Acacia auriculata*) contractors.

(iii) *Rights and privileges.*

32. The only right allowed was the grazing of 804 cows in *East Cuddapah.*

The free removal of grass was allowed in *Bellary*, *Anantapur*, *North* and *East Cuddapah* and *Chittoor* as usual. The value of the produce so removed was not furnished by any of the Collectors.

(iv) *Free grants.*

33. The statement below gives particulars of free grants which were made chiefly to ryots for rebuilding houses destroyed by fire. In *Nellore*, palmyra trees and leaves, etc., were granted for the construction of houses to criminal class at Kalichedu and Kavali settlements.—

—	Timber.		Fuel.		Bamboos.		Grass and grazing.	Other minor produce.	Total value.
	C.ft.	Value.	C.ft.	Value.	No.	Value.	Value.	Value.	
		Rs.		Rs.		Rs.	Rs.	Rs.	Rs.
Right holders	..	..	..	..	..	..	151	..	151
Free grantees	58,117	4,451	20	1	24,950	345	1,327	509	6,633
Total ..	58,117	4,451	20	1	24,950	345	1,478	509	6,784

(c) Outturn and sources of forest produce.

34. The following abstract gives the total outturn as compared with the previous year. The variations have been already explained.

Agency of exploitation.	Timber in cubic feet including sandal-wood.		Fuel in cubic feet.		Bamboos in numbers.		Minor produce (including grass and grazing) gross value in rupees.	
	1911-12.	1912-13.	1911-12	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.
1	2	3	4	5	6	7	8	9
							Rs.	Rs.
By Government agency ..	87,769	67,011	3,518,918	1,417,866	213,926	88,338	11,934	18,036
By purchasers (including confiscation).	1,054,247	1,396,145	1,549,646	4,208,548	1,530,595	1,683,367	6,68,445	9,41,935
By right holders	..	..	..	..	..	..	110	151
By free grantees	57,715	58,117	41,568	20	24,760	24,950	372	1,836
Total ..	1,199,731	1,521,273	5,110,132	5,626,454	1,769,281	1,796,655	6,80,861	9,61,958

The above figures are sufficient proof that the policy of extending exploitation of the forest by the agency of purchasers is being steadily persevered with.

The rates of grazing fees levied in several districts are shown in Form 74. The number of animals licensed to grazing on payment was 1,542,799 against 1,490,768.

CHAPTER III.—FINANCIAL RESULTS.

35. The financial results of the year compared with those of last year and with the previous quinquennial average show a net decrease of Rs. 1,10,154 and Rs. 1,79,130, respectively.—

—.	1912-13.	1911-12.	Average of preceding five years.
	Rs.	Rs.	Rs.
Revenue	10,20,163	12,26,569	11,46,168
Expenditure.			
A. Conservancy and works including Refunds.	3,77,090	4,79,178	4,76,504
B. Establishments	3,67,743	3,61,907	2,15,204
Total of A and B ..	7,44,833	8,41,085	6,91,708
Net Results ..	+ 2,75,330	+ 3,85,484	+ 4,54,460

The gross receipts are respectively Rs. 2,06,406 and Rs. 1,26,005 less than the previous year and the quinquennial average.

The net results show a surplus of Rs. 2,75,330 or 28·5 per cent. less when compared with that of last year. This is largely due to the change of system from departmental to contract working.

About 39 per cent. of the expenditure was devoted to the upkeep and improvement of the forests and 61 per cent. to exploitation, etc. It will be observed from Form 79 that the value of timber and other produce at sale depots at the close of the year amounted to Rs. 8,156 which is less than the previous year by Rs. 24,427 on account of the abolition of the departmental depots. The outstanding revenue at the beginning of the year was Rs. 2,31,428 and Rs. 5,32,919, at the close of the year. Of the latter Rs. 5,21,834 represents lease amounts falling due after the close of the year.

The important variations under the several heads are explained below :—

RECEIPTS.

(i) *By departmental Agency.*

Timber.—Rs. 30,866. The decrease occurred in all the districts and was due chiefly to the discontinuance of departmental operations in *North Cuddapah* and to the sale of the standing growth of 8 timber coupes on contract, which Mr. Daly the then District Forest officer took upon himself to sell in spite of the Conservator's disapproval of the system. Mr. Daly's conduct in this matter is now under enquiry. In *East Cuddapah* the decrease was due to the extraction and sale of miscellaneous timbers instead of Red Sanders alone as in previous years and in *Chittoor* to the temporary stoppage of marking red-wood trees in Mamandur Reserve for felling.

Fuel.—Rs. 2,21,134. Due chiefly to the introduction of contract system throughout the Circle.

Bamboos.—Rs. 2,610. Decrease due to the similar cause explained under "fuel".

Sandalwood. + Rs. 3,940. Realized in *Bellary* for the first time.

Minor Forest Produce. + Rs. 9,761. Due in *North Cuddapah* to departmental collection of minor forest produce to avert loss on account of very low bids obtained in auction; in *East Cuddapah*, to the sale of a large quantity of hay; in *Nellore* to increased collections.

(ii) *By purchasers.*

Timber. +Rs. 8,424. Due to increased revenue from value of trees on darkhast lands chiefly in *Bellary*, *Chingleput and Chittoor.*

Fuel. +Rs. 21,761. Due to the development made in replacing departmental working by contract agency in all districts. In *North Cuddapah* there was a deficit as some of the coupes were not sold for want of demand.

Bamboos.—Rs. 4,428. Decrease occurred chiefly in *Bellary* and *North Cuddapah* and is due to the payment of full lease amounts due for 1912–13 in the previous year.

Grazing. + Rs. 10,893. The increase occurred in all the districts except *North* and *East Cuddapah* and *Chittoor*. This has been explained in Chapter II.

Minor Forest Produce.—Rs. 14,713. Decrease due to the collection of only 3 Tangedu bark kists as against 5 in the previous year in *Bellary*, to the discontinuance of the sale of Rela (*Cassia Fistula*) bark in *Anantapur*, and to the stopping of minor forest produce leases for *Tuki* (*Diospyros Ebenum*) and Manure leaves in *East Cuddapah*. But this was partly made good by increase in *Nellore* from increased revenue from mica and tangedu bark (*Acacia auriculata*).

(iii) *Miscellaneous including confiscated drift and waif wood.*

Revenue. + Rs. 12,566.—This is a fluctuating item and the increase does not call for any detailed explanation.

EXPENDITURE.

A.—Conservancy and works.

The expenditure fell short of the previous year by Rs. 1,03,213 and was chiefly due to the discontinuance of departmental fuel operations and to the curtailment of expenditure on cultural operations in *Bellary* and *Anantapur*. The decrease was however partly counterbalanced by increased expenditure on hay operations and heavy programme of road works and acquisition of enclosures within reserves.

B.—Establishments.

The increase of Rs. 5,836 is due to the time scale of pay of Imperial and Provincial officers, to increased establishment sanctioned for the District Forest office, *Chittoor*, and to the charges incurred for the Vernacular Training school

CHAPTER IV.—ADMINISTRATION.

36. Mr. P. M. Lushington was in charge of the Circle up to 24th February 1913 and Mr. H. B. Bryant for the remainder of the year.

37. *New Ranges.*—Sidhout and Badvel Ranges in *East Cuddapah* were divided into three Ranges, viz., Sidhout, Badvel and Porumamilla; and old Chendragiri Range in Chittoor was divided into Tirupati and Chendragiri.

38. *Conduct of the Executive establishment.*—The conduct of the executive staff was fairly satisfactory except in *North Cuddapah*. One Probationary Ranger and one Deputy Ranger were dismissed and the services of another Probationary Ranger and several Deputy Rangers were terminated for their unsatisfactory work. One Ranger was reduced to lower grade and another temporarily for bad work.

39. *Protective staff.*—The conduct of the staff continues still to be unsatisfactory. It is doubtful whether any great improvement can be expected until pay and prospects have been increased, and better organization introduced.

40. *Ministerial establishment.*—The conduct of the establishment continued on the whole to be fairly satisfactory.

41. *Health of establishment and casualties.*—The health of the establishment was bad in *North Cuddapah* where two tannadars and two watchers died of fever. Fever was prevalent in parts of *Nellore* and *Chittoor*. In the rest of the Circle the casualties were one Deputy Ranger and one watcher died.

42. *Relations between Revenue and Forest officers.*—The relations between Revenue and Forest officers continued to be cordial and no complaints have been received.

43. *Service books.*—The service books are reported to have been maintained and verified in all the districts.

44. *Conservator's inspection.*—The Conservator inspected some of the forests of all districts in the Circle except *Anantapur* and *Chingleput*, and all offices except *Anantapur*.

45. *Touring of District Forest Officers.*—All the District Forest Officers except those of *North Cuddapah* and *Nellore* spent more than six months in camp. In *North Cuddapah* just the minimum was done as the district was held by the District Forest Officer, East Cuddapah, in addition to his own district and in *Nellore* the touring fell short by only five days.

46. *Inspection of Range offices.*—All Range offices were inspected by District Forest Officers except one in *East Cuddapah* which was a newly formed Range.

47. *Audit of accounts in District Forest offices.*—The accounts of all the District Forest offices except *Bellary* and *Chinglepút* were inspected by the special staff of the Accountant-General's office and results reported to be satisfactory.

48. *Imperial Forest College, Dehra Dun.*—One Probationary Ranger and four Deputy Rangers returned from the College with Ranger's Certificate and the first of these obtained Honours.

49. *Madras Forest College.*—Two Probationary Rangers and two Deputy Rangers were deputed. Of those deputed to the College last year, one Probationary Ranger was found unfit to follow the course and was removed and his services as probationary ranger were terminated; another became ill and was also removed on account of his long absence in excess of the period allowed under the rules.

50. *Vernacular Training School.*—A separate school was sanctioned for the Circle. It was located in the Balapalle forests of the *East Cuddapah* division. Three Foresters and 27 Forest Guards from *East Cuddapah*, *North Cuddapah* and *Chittoor* were deputed. Of these, one was sent back on account of ill health. Eleven Forest Guards deputed last year to Giddalur in Kurnool district returned to their duties in the Circle.

51. *Work and service of superior officers.*—The following remarks have been made by Collectors on the work of District Forest Officers:—

Bellary.—By Mr. A. F. G. Moscardi—"M.R.Ry. V. Alwar Chetty seems to be an efficient forest officer with considerable knowledge of his work and interest in it."

Guntūr.—By Mr. J. N. Roy—" Mr. Woutersz is a very keen Forest Officer and is turning out good work. Mr. Syed Abdui Khader's work too was satisfactory."

Cuddapah.—By Mr. J. F. Bryant—*North*—" I have reported elsewhere on the work of Mr. Daly. As for Mr. Whitehead I consider that he is taxed beyond what is fair. The work of two Forest districts is too heavy for him." *East*—" Mr. Whitehead's work and character were excellent. I could not wish for a better officer."

Nellore.—By Mr. T. Raghaviah—" M. R. Ry. C. M. Maduranayakam Pillai Avargal was in charge of the district throughout the year and ran it efficiently".

Conservator's remarks.—The Acting Conservator has inspected the districts of *North Cuddapah* and *Anantapur* recently. The Forest Administration by Mr. Daly of *North Cuddapah* was very bad and the matter is under enquiry. Mr. Hodgson in *Anantapur* district has done some good useful work and deserves credit for it.

CHAPTER V.—GENERAL.

52. *Realizations of Revenue from the usufruct of toddy yielding trees on Government wastes and poramboke lands.*—The revenue realized was Rs. 57,770 against Rs. 57,750 of the previous year.

53. *Measures adopted to encourage the growth of manure-leaf-yielding plants.*—Experiments in growing *Sesbania aculeata* were continued during the year and the seeds harvested were sent to the Agricultural Department for distribution. As reported in the previous year, the experiments proved a failure. The experiments have now been put a stop to under orders.

Rules under the Forest Act.

54. *Timber Transit Rules.*—In *Guntūr* the rules are stated to have worked satisfactorily. In *Cuddapah* a special set of revised rules was submitted to Board and these have been submitted to Government in Board's Proceedings Forest No. 152, dated 26th July 1913, for sanction. The revised rules introduced in *Chittoor* are reported to have worked satisfactorily.

55. *Rules under Section 26 of the Forest Act.*—The privileges allowed under the rules were generally availed of by the people and no serious complaints or abuses were reported.

56. *Inventory of valuable stock.*—The prescribed registers have been maintained and the stock verified in all the districts.

57. *Raingauges.*—These were maintained in all the divisions except *Chingleput.* In view of the fact that the Meteorological Department has reported that the statistics obtainable from raingauges maintained by the Forest Department are utterly unreliable, it is recommended that the number of stations be considerably reduced, and gauges kept only in those places where there is a probability of a trustworthy officer taking correct readings. It is obvious that readings recorded by a guard or a watcher are not to be relied upon.

58. *Supply of Forest Produce.*—In all the districts the contract system has been introduced and is making progress. In *East Cuddapah* some coupes were worked departmentally for want of proper contractors, and the fuel collected was sold. In *Chittoor* nine fuel coupes were worked departmentally and the fuel was supplied to the Railway. The departmental depots were closed in all the districts except two in *North Cuddapah* the retention of them was considered necessary to meet the wants of the towns people. The necessity for these will now be further enquired into.

59. *Rules for the guidance of Forest officers in compounding forest offences.*—*Vide* paragraph 15 of Chapter II.

60. *Cultivation in reserved forests with a view to growing trees.*—In *Bellary* no new areas have been leased out. The plants of 1908 are 6′ to 14′ high and those of 1911-12 are 1′ to 2′ high. In the Alur Range there is a small number of plants from sowings of previous years 2′ to 3′ in height. In *East*

Cuddapah, the patta given in previous years was renewed. It is not proposed to continue these experiments further.

61. *Suits.*—In *Bellary*, a suit has been filed in the District Munsiff's Court, Bellary, by one Narasingadu claiming Survey Nos. 70-A/2 and 72 of Yerragudi and it is pending. In *Guntur* Rs. 207–11–2 out of Rs. 255–4–6 decreed in favour of Government were realized by the sale of the property and the balance written off by the Board. The suit brought by the Jagirdar of Putlampalli in *North Cuddapah* has been disposed of in favour of Government but an appeal is said to have been made to the High Court. In *Nellore* the Letters Patent appeal was dismissed without costs.

62. *Live-stock.*—*Vide* form No. 84. Government bulls were used in *Chittoor* alone for carrying fuel for supply to the Railway. The Railway contract has now closed; and steps will be taken to dispose of the bulls.

63. *Mining.*—In *Bellary* no mining lease was granted but an application received from Mr. A. Ghose is now before Government. An exploring license for a portion of the Bellary reserve, prospecting licenses for five minerals in Copper Mountains and for manganese ore were granted to Mr. A. Ghose. Applications for prospecting minerals in Joga and Hospet Reserves, Red Oxide in Joga A and B blocks and manganese ore in Thimmaragudi have been received and they are pending disposal except one which has been rejected. In *Anantapur* no additional licenses for prospecting gold were given and the area granted in Ramagiri Reserve was disafforested. In *Guntūr*, one exploring license for diamonds and precious minerals were granted to Messrs. Jamban & Co., Calcutta, in Venkatayapalem Reserve and its extensions. No stone of any commercial value has been found and the Company has applied for a prospecting license. A license to prospect corundum in Damalcheruvu in *Chittoor* was granted but no work was done by the licensee.

Nellore Mica and Mica Mines.

64. *Applications.*—Thirty-two applications were pending at the beginning of the year and 99 were received during the year. Of these 52 were disposed of and 79 remained as balance at the end of the year. A large number of these was for prospecting licenses.

Mines in Government lands (*State mines*).—There were 33 working mines at the beginning of the year and there were no relinquishments or cancellations. Two fresh mining leases were granted making a total of 35. Besides these six exploring and eight prospecting licenses were granted. Most of the mines worked well and may be considered promising.

Patta land mines (*shared mines*).—The 23 mines which remained at the close of the previous year continue to be worked. Of these the "Kubera" mine yielded the largest produce.

Mines in permanently-settled estates (*private mines*).—The 11 mines continued to be worked, and yielded 269,717 lbs. 13 oz. of mica of all classes estimated at Rs. 1,19,699. All these are in shrotriem lands. Of these Kalichedu and Pokkandala are valuable.

Illicit mining.—There was one case of illicit mining. The coolies concerned were prosecuted and punished. A prosecution has since been launched against the abettor and the judicial enquiry is still pending. In the case shown as pending last year in Government lands two persons were charged; one of them was fined and the other discharged.

Outturn and royalty.—There was a great increase in the consignments and output and of the royalty realized over the last year's figures. This is ascribed to favourable condition of the market and the steady working of the mines and Rs. 951 still remain to be realized. Besides mica, 336 lbs. of garnet and 3,263 lbs. of samaraskite were also despatched. A royalty of As. 4–6 on the former

Year.	LBS.	OZ.	RS.
1911–1912 ...	688,872	*10	16,983
1912–1913 ...	1,160,703	12	23,505

* Figure in the last year's report is a misprint.

and Rs. 30–9–6 on the latter was realized. The China-clay lessee who was given two years' time has not started work yet. His lease expires by November next.

Financial Results.—The revenue realized was Rs. 26,106 against Rs. 19,997 of the previous year and the expenditure was Rs. 4,256 against Rs. 4,012.

Labour.—2,092 persons were employed against 1,796 in the previous year. In spite of the increase in the number of labourers, the mine owners experience a general dearth of labour; children are not allowed to work in the mines but are employed above ground mostly in dressing mica. Similar work is done by women also.

Accidents.—There was one accident with explosives at the "Kubera" mine but it was not of a serious nature.

Ventilation and lighting in tunnels.—No improvement has occurred under this head.

Inspection by superior officers.—The District Forest Officer visited the "New lands" mine. The Divisional officers visited ten and the Collector two mines. No inspections were made either by the Inspector of Mines or the District Medical and Sanitary Officer.

Prospects of industry.—The industry shows good signs of improvement and the market has been favourable. The nine cancelled mines of M.R.Ry. Ansur Subba Nayudu have been very lately placed in the hands of a Receiver and it is hoped they will be worked in the current year.

MADRAS,
26th September 1913.

H. B. BRYANT,
Ag. Conservator of Forests, Central Circle.

INDEX.

FOREST ADMINISTRATION REPORT,

MADRAS PRESIDENCY,

SOUTHERN CIRCLE, 1912–1913.

Chapter.	Subject.	Paras.
I	Constitution of State forests—	
	1. Alteration in area	1
	2. Forest settlement	2
	3. Demarcation	3
	4. Forest surveys	4
II	Management of State forests—	
	1. Regulation of management—	
	(*a*) Preparation and control of regular working-plans	5
	(*b*) Annual plan of operations	6
	2. Communications and buildings—	
	(*a*) Roads and bridges	7
	(*b*) Buildings	8
	(*c*) Miscellaneous works	9
	3. Protection of forests—	
	(*a*) General protection	10 to 12
	(*b*) Protection from fire	13 to 15
	(*c*) Protection from cattle	16
	(*d*) Protection against injuries from natural causes	17
	4 Sylviculture—	
	(*a*) Natural reproduction	18
	(*b*) Artificial reproduction	19 & 20
	(*c*) Operations for improvement of the growing stock	21
	(*d*) Experiments	22
	5. Exploitation—	
	(*a*) System of management—	
	(i) Major forest produce	23 to 26
	(ii) Minor forest produce	27 to 30
	(*b*) Agency of exploitation—	
	(i) Departmental agency	31
	(ii) Purchasers	32
	(iii) Rights and privileges	33
	(iv) Free-grants	34 & 35
	(*c*) Outturn and sources of forest produce	36
III	Financial results	37
IV	Administration	38 to 52
V	General	53 to 72
	Appendices A to E and Forms Nos. 65 to 85.	

FOREST ADMINISTRATION REPORT OF THE SOUTHERN CIRCLE

FOR THE

FOREST YEAR ENDING 30TH JUNE 1913.

CHAPTER I.—CONSTITUTION OF STATE FORESTS.

1. Alteration in Area.

Reserved forests.—An addition of 946 acres by transfer from reserved lands and a deduction of 6 acres by disafforestation were the variations during the year. The total area of reserved forests in the circle at the end of the year was 4,413 square miles.

Reserved lands.—Four small areas aggregating 88 acres were newly constituted and 946 acres transferred to reserved forests. The area of reserved lands in the circle at the end of the year was 55 square miles.

2. Forest Settlement.

2. Two small additions in North Salem, four in Madura and sixteen in Tinnevelly *cum* Rāmnād were finally settled during the year. Four small additions aggregating 88 acres were brought under settlement. The balance under settlement was 20 blocks, but the actual settlement of 7 of these was completed.

3. Demarcation.

3. One hundred and eleven miles of permanent demarcation was carried out during the year at a cost of Rs. 4,673. The progress was chiefly in Madura, where the total expenditure was Rs. 4,653 against Rs. 3,896 in the previous year. The demarcation of reserves of Tandigudy range as per revised boundary description is still in progress. During the year, revised notifications for five reserves in Tandigudy range (Kokkuparai, Kanienkadu, Siruvathukadu, Pambukallar and Maruthanathiar) and one reserve in Kodaikānal range (Muliyar) have been prepared by the Special Deputy Collector. Sanction has been obtained for the retention of the services of this special officer for a further period of two years for the investigation of twelve reserves in Kodaikānal range. A sum of Rs. 205 was spent on preliminary demarcation of proposed reserves. In North Vellore and South Arcot Rs. 293 was spent on rectification of defects in boundaries. Six hundred and fifty miles of boundaries were repaired at a cost of Rs. 1,554 and 6,821 miles were re-cleared by subordinates free of cost. Three hundred and thirty-eight miles remained to be demarcated at the end of the year, of which 320 miles are in Madura.

4. Forest Surveys.

4. No work was undertaken by the Survey of India Party during the year. In North Salem, two surveyors were employed in demarcating fuel coupes, aligning roads and revising the estimate of the Aiyur-Anabiddahalla road. In South Salem, a surveyor was employed in aligning roads. In Trichinopoly and South Vellore, fuel coupes were surveyed departmentally. In Madura, the services of the surveyor appointed to assist the Special Deputy Collector were retained throughout the year. One hundred and fifteen square miles remained to be surveyed and final maps remained to be prepared for 255 square miles at the close of the year.

District Forest reference and other maps referred to in section 80 of the Forest Code were maintained and posted.

CHAPTER II.—MANAGEMENT OF STATE FORESTS.

1. Regulation of Management.

(*a*) *Preparation and Control of Regular Working Plans.*

5. *Preparation.*—No new working-plan was sanctioned during the year. There has been, however, progress with the preparation of working-plans in *Salem North*, *South Vellore* and *South Arcot* and there should be considerable progress shown during 1913–14. Extra Assistant Conservator, Mr. J. Sadasiva Ayyar, was posted to *Salem North* for preparing working-plans. He has practically completed a working-plan for the Dharmapuri range consisting of 164½ square miles. After the close of the year Mr. Cornwell, Extra Assistant Conservator, was posted to *Vellore South*, but fell ill unfortunately, shortly after joining. In *South Salem*, a reconnaissance report for working bamboos in 12 reserves of the Chitteri hills was approved by the Conservator and a working-plan is now under preparation.

Control.—In *North and South Salem* and *South Vellore* it was found advisable to reduce the bamboo rotation from five to three years In *Trichinopoly*, working-plans prepared for padugais and the upland reserves in Kulitalai and Udaiyārpālaiyam ranges have been held in abeyance pending orders on the Forest Committee's report. In *Madura*, proposals for the revision of the prescriptions relating to timber in the working-plan for Cumbum range are under consideration.

The following were the chief deviations from the existing working-plans :—

In both *North* and *South Vellore*, several arrear coupes were not worked and a large number now remain unworked for want of demand and on account of difficulty of transport. In *South Vellore*, Board's sanction was obtained for deviations from the prescriptions of working-plans in respect of five working circles. In *South Arcot*, many of the arrear coupes were worked during the year. In *North Salem*, fellings continue to be generally behind-hand and several coupes could not be worked for want of competent contractors. In *South Salem*, work in 18 out of 30 sanctioned working circles was carried out, but fellings continue to be in arrears for want of means of transport to markets. In *Trichinopoly*, 2 fuel coupes of Namakkal and a large number of coupes of Musiri range were not sold. In the Tinnevelly babul areas, advance working continued for the supply of fuel to Palamcottah Jail.

(*b*) *Annual Plan of Operations.*

6. Besides the deviations mentioned in paragraph 5 *supra*, the only important deviations were—

South Vellore.—Felling timber in Mulacad was stopped as commercially it was unworkable ; it is now proposed to carry out an improvement felling and to dispose of the produce for what it will fetch. Alignment of road from Andiappanur to Singarapet was postponed in favour of connecting Vasanthapuram with the existing road from Andiappanur to Kambugudi. *South Arcot.*—Planting of casuarina was given up as the plantations were ordered to be sold. The construction of many proposed buildings was postponed pending receipt of orders on the Forest Committee's report. *North Salem.*—Construction of the road from Biligundlu to Kestur was begun. *South Salem.*—The Thammampatti rest-house not provided for was nearly completed. Construction of Subordinates' lines and rest-houses at Kottapatti, Chitlinghi and Cauvery Peak and of the road from Panamarathupatty to Tirumanur had to be postponed for want of funds.

2. Communications and Buildings.

(*a*) *Roads and Bridges.*

7. The total expenditure on new works amounts to Rs. 12,307 and on repairs to Rs. 23,337 as compared with Rs. 23,495 and Rs. 12,581, respectively, in the previous year. In *North Vellore*, five miles of road from Pinnathorai to Odugathur were constructed. In *South Vellore*, large amounts were spent on repairs to the existing roads which had been long neglected. In *North Salem*, Palakode-Kesarguli road, Vadugampatti-Lokur road and Karadiyur bungalow road were completed during the

year. A bridle-path to Sanniyasimalai was constructed and alignment of a bridle-path from Anchetti to Urigam was commenced. In *South Salem*, bridle-paths from Periakombai to Poosanikuli and Papireddipatti to Kombutukki were constructed. Preliminary traces were made for the opening of cart-tracks to tap several working circles in the division. In *Trichinopoly*, several rough bridle-paths aggregating 59½ miles were constructed for opening up the Kollimalais. In *Madura*, besides the maintenance of all existing roads, a road from Natham-Dindigul road to Periamalai (five miles) was constructed and the Sendurai-Pillayarnattam road was extended by 3 miles. In *Tinnevelly*, 6 miles of bridle-paths and cart-tracks were constructed during the year.

(*b*) *Buildings.*

8. During the year the total expenditure on new buildings and on repairs amounted to Rs. 45,057 and Rs. 12,585, respectively. The important new works were :—

North Vellore.—Construction of Range office and quarters at Odugathur. *South Vellore.*—Completion of Thanipady rest-house and construction of a rest-house and out-houses at Shenbagatope. *South Arcot.*—Completion of Shanikulam rest-house and of Subordinates' quarters in Arasampattu, Takarai North and Palankur beats. *North Salem.*—Completion of rest-houses at Medugampalli and Karadiyur and part construction of rest-houses and out-houses at Jowlagiri, Hogankal and Anchetti. *South Salem.*—Completion of Ranger's and Subordinates' quarters at Papireddipatti and part construction of rest-houses at Thammampatti and Papireddipatti. *Trichinopoly.*—Part construction of a bungalow and out-houses at Kulivalavu on the Kollimalais. *Madura.*—Completion of rest-house with out-house at Pillayarnattam and of Subordinates' lines at Alampatti, Vembady shola and Rajadani and part construction of a rest-house at Ayalur and of Subordinates' lines at Kombai, Gullappagoundenpatti, Kottur, Kavunji and Pambar Hill. *Tinnevelly.*—Completion of quarters for subordinates at Mundanthorai, Pudupatti, Kannikatti and Sivasailam and of a rest-house and Deputy Ranger's quarters at Chellapulli.

(*c*) *Miscellaneous works.*

9. In *South Arcot*, Nabob's tope reserved forest was wire-fenced. In *Trichinopoly*, a dam was built to improve the water-supply at Kulivalavu. In *Tinnevelly*, the building up of the high bank of the Mundanthorai rest-house compound overlooking the Serviar which was being damaged by floods was carried out. Twenty-five new wells were sunk, several of the existing wells were deepened or repaired, and compounds fenced in several districts.

3. Protection of Forests.

(*a*) *General Protection.*

10. The following statement gives the number of offences of the year compared with the previous year :—

Class.	Injury to forests by fire.		Unauthorised felling or appropriation of wood and minor forest produce.		Grazing without permission or in the tracts in which grazing is prohibited.		Other offences.		Total cases.	
	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.
Cases taken into court ..	25	15	1,478	1,459	543	472	121	112	2,167	2,058
Cases compounded ..	2	1	6,848	7,040	2,803	2,762	197	250	9,850	10,053
Cases undetected ..	334	241	159	160	48	50	20	8	561	459
Total ..	361	257	8,485	8,659	3,394	3,284	338	370	12,578	12,570

The total number of offences is practically the same as last year. The decrease in the number of fires reported is marked, the districts responsible being North and South Vellore. The increase under unauthorized felling was reported from South

Arcot and North Salem. The decrease under grazing is attributed to closer supervision which has resulted in an increase of Rs. 25,155 in the grazing revenue of the year. Under other offences the increase was chiefly in South Vellore.

Cases brought to trial.

Year.	Convictions.	Acquittals.	Percentage of failure.
1911-12	1,808	159	8·08
1912-13	2,043	168	7·60

The decrease in acquittals in South Arcot and North Salem is satisfactory. There was, however, a large increase in acquittals in Trichinopoly due, it is reported, to want of competent men to handle the cases in courts against professional lawyers. It is also attributed to complicity of village officers with offenders. The increase in Madura was due to the disposal of long-pending cases most of which ended in acquittal. In Tinnevelly, acquittals rose chiefly on account of certain irregularities in reporting offences and the conduct of subordinates responsible has been taken notice of.

Cases compounded.

Year.	Number of cases.	Amount.
		Rs.
1911-12	9,303	82,140
1912-13	9,504	95,116

During the year under report, a larger number of cases were compounded. Attention was paid to the orders contained in G. O. No. 1990, dated 13th June 1910, in fixing the amount of compensation. In South Vellore, the increase was due to the levying of heavy compounding fees in cases of illicit browsing. As in the previous year, systematic levying of compounding fees in accordance with the orders of Government referred to, accounted for the increase in compounding fees.

11. Punishments inflicted by Magistrates were generally satisfactory. There were no cases of importance calling for special mention.

12. A reward of Rs. 50 was granted to 5 subordinates in South Vellore division for detecting a case of illicit felling after sunset. In no other district, were rewards granted. I am of opinion that wherever protection is bad, rewards should be more frequently granted. It would certainly do good, for instance, if rewards were granted in Salem for the detection of goat-browsing in reserves.

(*b*) *Protection from fire.*

13. *Special Protection.*—There was no change in the system of protection. The area attempted to be protected was 1,148·70 square miles against 1,016·45 square miles in the previous year and the area burnt during the year was 12·81 square miles against 17·1 square miles in the previous year. Successful protection increased from 98·3 to 98·9 per cent. and the cost per square mile of successfully protected area was Rs. 13-13-4 against Rs. 13-4-5 in the previous year. Increase is due to clearing of lines in areas newly brought under special protection. In North Vellore, Malayalees in the Javadis are reported to have carried out satisfactorily their obligations in respect of prevention of fire. In North Salem, Sanniyasimalai reserve enjoyed immunity from fire for the first time for many years. The result of the experiment of giving the Malayalees certain grazing concessions provided fires were kept out is reported to be encouraging.

The results are generally satisfactory in all districts except in Tinnevelly and Madura. In Tinnevelly, it was a bad year. One thousand four hundred acres were burnt through carelessness in burning fire lines and a large area had to be closed to grazing on account of incendiarism. In Madura, the area burnt by fires entering the forests by crossing exterior fire traces rose from 1,564 to 4,831 acres. Area maliciously fired was 3,290 acres while no such firing was reported in the previous year. The origin of most of the fires reported is doubtful and satisfactory detection is seldom made. I am of opinion that liberal rewards should be granted for good work done in detection of cases of fires.

14. General protection was attempted over 2,977 square miles against 3,076 square miles in the previous year. The decrease was due to the transfer of certain reserves in North Salem and Madura to special protection. The percentage of failure slightly increased from 1 per cent. to 1·17 per cent. On the Pachamalais in Trichinopoly, general protection was carried out by the willing co-operation of the hill people.

15. The number and origin of fires are given in Appendix D. There were 250 fires burning 30,539 acres against 356 fires and 30,591 acres burnt in the previous year.

(c) Protection from cattle.

16. Eighty per cent. of the total area of reserved forests is opened to grazing of cattle but closed to goats. The area closed to all animals was 729 square miles against 654 square miles in the previous year. The increase is due to the closure of 3 specially fire-protected blocks along the Cauvery in North Salem and in Trichinopoly, to increase of area in accordance with the prescriptions of the working plans. Goat-browsing was allowed in North Vellore over 26 square miles, in North Salem over 58 square miles, and in Madura over 68 square miles only, and not 106 square miles as reported in the previous year. The areas open in North Vellore and Madura have since been reduced to 15 and 35 square miles, respectively. In Salem there has been some delay in this matter but it is hoped that by 1st July 1914 goats will be excluded from all reserved forests.

The number of cattle impounded during the year is given in Appendix E. The total number impounded was 56,642 against 56,134 in the previous year. The increase occurred in Sonth Vellore, South Arcot, North and South Salem and Trichinopoly and is generally attributed to better supervision.

The following statement furnishes the grazing incidence in each district:—

District.	Number of cattle in cow units.	Area in acres.	Number of acres per cow unit.
North Vellore	130,858	275,200	2·10
South Vellore	149,620	448,640	2·99
South Arcot	143,017	200,960	1 40
North Salem	199,125	468,480	2·35
South Salem	113,485	333,440	2·94
Trichinopoly	156,290	198,400	1·27
Madura	155,656	353,920	2·27
Tinnevelly	32,227	113,920	3·53

Note.—One buffalo = Two cows.
Two sheep = One cow.
One goat = Two cows.

The forests in all districts and especially in North Salem are still far too heavily grazed, over but this subject must remain open till orders are issued on the Forest Committee's report.

(d) Protection against injuries from natural causes.

17. *North Vellore.*—Many casuarina saplings in Vannivedu, Virinchipuram and Ammundi plantations were killed by disease. Red sanders and casuarina planted in several plantations were also badly damaged by the attack of beetles, which were hand-picked and destroyed as far as possible. *South Vellore.*—Caterpillars were found attacking the young leaves of sandal trees in Tiruppattūr range, but disappeared after some heavy showers. Specimens were collected but have not yet been identified. In Perambalur and Udaiyārpalaiyam ranges of *Trichinopoly district*, the parasite *Loranthus longiflorus* periodically affects the growth of *Albizzias* and *Melias*. *Tinnevelly.*—Steps were taken for the eradication of lantana on a small scale where necessary. It is reported that much damage is still caused to coppice reproduction of *Pterocarpus Marsupium* by Sambhur. Prickly-pear is a pest in many districts especially in Madura and North Salem. Uprooting prickly-pear is, however, far too expensive to be carried out on any large scale. No spike disease is reported from Salem.

4. Sylviculture.

(a) *Natural Reproduction.*

18. *North Vellore.*—Reproduction from coppice was good in all the felled coupes In the fire-protected areas closed to grazing, reproduction of *Acacias*, *Albizzia amara* and teak was successful. Teak and *Chloroxylon Swietenia* seeded profusely throughout the division, and *Hardwickia* seeding was also very good in the reserves of Ambur and Gudiyattam ranges. *South Vellore.*—Natural reproduction of *Anogeissus latifolia* on the Javadis plateau, *Hardwickia binata* in Karnataghir and *Gardenia gummifera* in dry localities near Thaniar was very good. Root-sucker system of reproduction of sandal having been found a failure is now supplemented by sowing seed in the hollows left by the uprooted trees and the results are being watched. Natural reproduction of *Albizzia odorotissima*, *Anogeissus latifolia*, *Hardwickia binata*, *Pterocarpus Marsupium*, *Santalum album*, *Shorea talura* and *Tectona grandis* by seed in the hill forests, and of *Chloroxylon Swietenia*, *Acacia sundra* and *Albizzia amara* in the plain forests was fairly satisfactory. *South Arcot.*—Regeneration by seed of *Acacias*, *Chloroxylon Swietenia* and *Melia indica* was fairly good. Reproduction by coppice shoots was generally good in all coupes. *North Salem*—Regeneration of sandal was very poor owing to the failure of south-west monsoon. An abundance of *Hardwickia* seedlings is reported along the Cauvery. Reproduction of *Melia indica*, *Albizzia Lebbek*, *Albizzia amara* and *Chloroxylon Swietenia* was satisfactory. *South Salem.*—Reproduction by seed was satisfactory in Atur, Salem East and Harur South ranges, but it was not satisfactory in Harur North range. Seedlings of sandal were found in large numbers. *Trichinopoly.*—Seedlings of *Santalum album*, *Albizzia odorotissima*, *Chloroxylon Swietenia* and *Anogeissus latifolia* were abundant in the inaccessible parts of the higher slopes of the Pachamalais. On the Kollimalais and in other parts, reproduction by seed was poor owing to the failure of the monsoon and extreme hot weather. In the felled coupes, coppice shoots were successful and in the padugais *Inga dulcis* and *Cassia Fistula* (*Konnai*) coppiced freely. Prickly-pear was found to afford valuable protection to seedlings. *Madura.*—Reproduction by seed was generally satisfactory and that by coppice in the coupes felled was also satisfactory but slow in development. *Tinnevelly.*—Reproduction from coppice was satisfactory wherever cutting was done flush with the ground, and that by seed was noticeable in the areas closed to grazing and in the shola forests. Teak seedlings are scarce but where there is loose soil and open ground they are reported to have been found in abundance. More *Hopeas* were surviving in the forest in the Tambraparani basin than was supposed. From districts where sandal exists, it is reported that the species is steadily spreading through the agency of birds.

(b) *Artificial Reproduction.*

Regular plantations.

19. *North Vellore.*—Very successful planting of *mahogany*, rosewood, red sanders and *Hardwickia* was carried out in Amerdi plantation. Planting of red sanders in Pichanur tope was most successful. In Arcot range, many seedlings of red sanders and *Hardwickia* planted out died from prolonged drought. *South Arcot.*—There was no planting of casuarina as the areas are to be given up. The areas planted in the previous years were watered and maintained. Two hundred and fifty graft mangoes were planted in the Sankarapuram North Bagyat tope and 100 in the Nabob's tope. In the former, 107 plants died on account of unsuitable soil and from attack of white ants and in the latter, there were several casualties due to scarcity of water. These operations were ordered to be discontinued. *North Salem.*—Blanks in 55 acres of Sanniyasimalai were planted with 9,500 basketted Cyprus plants. In another area of 62 acres in the same reserve, patch sowings of Wattle 9 feet apart were carried out. The results are being watched. *Trichinopoly.*—Ten acres were added to the existing area. Owing to the carelessness of the subordinates, a fire which occurred in the plantation and was not promptly put out destroyed 4,621 saplings. The plantations in Vengur padugais and Marudur were maintained successfully. Valuable species planted in other padugai reserves of Udaiyārpālaiyam were also maintained. *Madura.*—The growth of teak in Vannathiparai and Velan

Combai plantations was moderate. The blue gum trees in Gundanshola continue to thrive well. The pine plantation in Gundar valley extension was continued and 1,42,072 seedlings were raised and basketed. Fifty-four thousand nine hundred and thirty-nine seedlings were planted in this plantation at a uniform distance of 9 feet apart and 10,000 were put out at Vandaravu. The plants of previous years continue to come up well. In the Upper Palnis, wattle plantations have not come up satisfactorily and in one place there has been a complete failure. Arrangements have been made to dig fresh pits and plant small seedlings and root-suckers in the middle of the monsoon. *Tinnevelly.*—Banyan and *Odina Wodier* cuttings were planted in Kudiramoliteri reserve with fair success. Planting of teak in 10 acres cleared by Kanis was tolerably successful and improvement each year may be expected. Out of 3,000 nursery reared plants 1,800 are reported to be surviving. Part of the area was dibbled with seed of the same species and the result is reported to be fairly successful.

Cultural operations.

20. *North Vellore.*—Red sanders seed was dibbled in Banavaram reserve and the result was not encouraging for want of timely rain. In Panamadangi reserve, sowing of *Terminalia arjuna* was successful. Dibbling in coupes in previous years has been a total failure. *South Vellore.*—The results of sowing seeds in felled coupes were not favourable. Seeds germinated well, but many of the young seedlings were killed by drought. *South Arcot.*—As in the previous year, a good deal of attention was paid to these operations. Seeds of miscellaneous species were sown over a total area of 808 acres, but the results were not satisfactory as most of the seedlings that came up died. Two hundred and thirty-six measures of cashew seeds were dibbled over an area of 44 acres. The result in this case also was not satisfactory on account of the drought. Seeds of *Sesbania aculeata* were sown over an area of 20 acres in all the ranges for the purpose of raising seeds for supply to ryots. The operation was not successful on the whole. *North Salem.*—Seventy acres in Nagaramalai reserve were sown with sandal. The prospects of success are reported to be hopeful. *South Salem.*—The operations, as in the previous year, consisted in dibbling in of seeds in blanks in felled coupes and also in planting cuttings and sowing seeds in pits in specially-protected blocks. The results were not generally satisfactory as most of the seedlings died during the hot weather. *Trichinopoly.*—Ten and a half measures of Sesbania seeds were sown and 19 measures of seeds were harvested. Babul and *Kodukka* (*Inga dulcis*) seeds were dibbled in certain padugai coupes. The former germinated profusely while seedlings of the latter species were found only here and there. *Madura.*—Forty-four measures of Sesbania aculeata (Daincha) seed were sown in the different ranges. Four hundred and forty-three measures of seed were obtained at an average cost of As. 5–3 a measure. Three hundred and ninety-eight measures were sent to the Co-operative stores, Madura, for sale and the balance retained for departmental needs. It has been decided to continue the experiment for another year. *Tinnevelly.*—Four thousand seven hundred and nine measures of seeds of different species collected by subordinates were sown in coupes. Germination was generally fair but only a small percentage of plants survived. It is reported that *Albizzia Lebbek* does well.

(*c*) *Operations for improvement of the growing stock.*

21. In all districts, creepers and climbers affecting standards in all the felled coupes were cut and removed by subordinates. In *South Arcot and Tinnevelly*, bamboo clumps in certain reserves were thinned. In the latter district, the operation was done in the hot weather which is the wrong season, with the result that a lot of shoots which came up died. It is proposed to continue the operation in future in September. In *Trichinopoly*, thinnings of casuarina by removal of dead, dying and damaged trees were carried out in Vettangudi reserve.

(*d*) *Experiments.*

22. *Acacia auriculiformis.*—In North Vellore, the species is doing well, and the experiment will be continued. In Trichinopoly, seed was sown in Karaipakam reserve. One hundred and fifty plants were transplanted, but are not promising due most likely to unfavourable soil.

Bengal Daincha—South Arcot.—One hundred measures of seeds were sown in November 1912, but the seedlings did not survive the hot weather.

Pinus longifolia—North Salem.—Five hundred seedlings were raised, basketted and planted in Sanniyasimalai.

Dalbergia sissoo—South Arcot.—Thirteen seers of seed received from Lahore were sown in the Coast Casuarina plantations. Germination was satisfactory.

Eucalyptus—North Salem.—The plants put down at Sanniyasimalai show a growth of only about 6 feet at three years of age.

Hardwickia binata.—This species is doing very well in Ammanur reserve of North Vellore. In Tinnevelly, there are trees planted about twenty years ago at Koilteri.

Mangifera indica —One hundred and three trees are thriving in Thaniar bungalow compound in South Vellore.

Pterocarpus santalinus (Red Sanders).—This species is doing remarkably well in Palamady, Ambur and Banavaram reserves in North Vellore. In South Vellore, 110 trees are thriving in the Thaniar bungalow compound. In Salavady reserve of South Arcot, the tree continues to thrive well. Of the plants put down in previous years, 510 varying from 1 to 7 feet in height exist. Of 2,178 plants put down during the year under report, 1,900 are surviving.

Rosewood.—Introduced into Amerdy is doing remarkably well.

Swietenia macrophylla—South Vellore.—Twelve trees in Melpat bungalow compound are in good condition. *South Arcot.*—Three trees in Veppur reserve are now 19 feet in height. Two pounds of seed have been sown in certain plantations.

Swietenia Mahagoni—North Vellore.—The seedlings put down in Chenur plantation are not doing well. Out of 48 plants put down in 1904 in Arasampet bungalow compound, 25 are surviving. The species is reported to be promising in suitable localities. *South Vellore.*—Fourteen trees are in good condition in Melpat bungalow compound. *South Arcot.*—Of the trees planted in previous years, 90 are surviving, varying in height from 10 to 25 feet. One thousand seeds were sown in Salavady reserve. Forty-two only germinated and 38 seedlings survived. *North Salem.*—Five hundred seedlings planted in Sanniyasimalai reserve are not very promising. *Trichinopoly.*—The species was tried in two reserves and Sengattupatti bungalow compound. The plants are thriving. *Madura.*—The trees in front of the bathing mantapam in the Alagar Hill reserve are reproducing themselves naturally by seed and those in the compound of Kanavoipatti rest-house continue to thrive.

5. Exploitation.

(*a*) System of Management.

(*i*) *Major Forest Produce.*

23. The total area of forests under working plans is 2,706 square miles. The various sylvicultural systems in force over this area are shown in the following table :—

Sylvicultural system.	Area in square miles.	Percentage of total area under each sylvicultural system.
Clear fellings	·73	·03
Simple coppice	·41	·01
Selection fellings	504·78	18·65
Coppice with standards...	676·16	24·99
Improvement fellings	284·82	10·53
Forests for which working plans have been prepared but not subjected to any definite system of working	1,239·10	45·79
Total ...	2,706·00	100·00

(1) *Clear or Regeneration fellings and* (2) *Selection fellings.*

24. *Clear or regeneration fellings.*—In South Arcot, ten coupes of 491 acres in the Coast Casuarina plantations and one coupe of 23 acres in Tirumalavasal Casuarina plantation in Trichinopoly were clear felled by contractors.

Selection fellings.—In North Vellore and South Arcot, selection fellings were carried out in bamboo coupes. In South Vellore, selection fellings were carried out in 5 sandalwood coupes, and in North Salem, extraction of sandalwood for export to Europe and timber for supply to Remount depot was carried out. In South Salem, 17 bamboo coupes were worked by contractors and some sandalwood was extracted departmentally. In Madura, 60 first and 100 second-class trees were marked and sold to a contractor in accordance with the provisions of the working plan.

(3) & (4). *Improvement and Coppice fellings.*

25. The following coupes were felled under coppice with standards :—

Thirty-five fuel coupes in North Vellore, 42 in South Vellore, 51 of 4,059 acres in South Arcot, 53 in Trichinopoly, 28 of 2,707 acres and 16 tank beds in Madura, and 16 coupes and 12 tank beds in Tinnevelly. Under the same system some fuel coupes were worked in North and South Salem. Particulars are not given in the reports.

Coppice without standards.—Two tank beds and 5 forest coupes were worked in Tinnevelly.

Improvement fellings.—Twenty-seven bamboo coupes in South Vellore were worked under improvement fellings. Bamboo blocks in North Salem and some timber coupes in South Salem were worked under the system.

(5) *Unregulated fellings.*

26. In South Arcot and South Salem, unregulated fellings under the permit system were, as in the previous year, confined to unreserves. In North Salem, the system was stopped during the year.

Minor Forest Produce.

(1) *Miscellaneous produce.*

27. Minor forest produce was generally leased out. Permits were issued for manure leaves and stones in North and South Vellore and South Arcot and for thatch grass, stones and thorns in Madura. In South Arcot, there was a large fall in revenue on manure leaves due to the increase in the seigniorage rate. In last year's report it was stated that the sale of permits by Revenue officers for the removal of Avaram bark from the unreserves of Trichinopoly district would probably result in a large fall of revenue. It is now reported that the decrease has amounted to Rs. 10,034.

(2) *Extraction of Fodder.*

28. In North Vellore, free removal of grass from all reserves was permitted. It is difficult to estimate the value of these free removals, but it is reported that about 26,000 cartloads valued at Rs. 7,500 were removed. It is not stated how these figures were arrived at and, in my opinion, they are far too high. The concession of free removal of grass from all coupes closed to grazing was not availed of in South Arcot. From North Salem, it is reported that there is no demand for fodder. In South Salem and Trichinopoly, there were no free removals. In Madura, permits were, as usual, issued and in Tinnevelly, grass was as in previous years included in minor produce leases. No information on this point is given for South Vellore.

(3) *Hay-making.*

29. During the year, Banavaram reserve in North Vellore division was leased out to the Military Department on payment of royalty of Rs. 2 per ton on hay removed. In North Salem, 22 tons of hay was collected from the South Shevaroys and Lokur working circles at a cost of Rs. 55 and sold in auction for Rs. 82–8–0 ; three tons and 1,120 lb. was collected from Krishnagiri range at a cost of Rs. 12 and sold in auction for Rs. 23–8–0, and 11 tons was collected from Jowlagiri and Sanamavu reserves of Denkanikotta range at a cost of Rs. 116–11–0 and sold to the Remount Depot for Rs. 218–14–4. The net result was a profit of Rs. 141–3–4. In

South Salem, four tons and 560 lb. of hay was collected from the Harur specially protected block at a cost of Rs. 15 but a sum of Rs. 14-10-0 only was realized by sale. In Trichinopoly, a small quantity of about two cart-loads was collected from plantations and sold for Rs. 46.

(4) *Grazing.*

30. The revenue derived from grazing was Rs. 2,18,586 against Rs. 1,93,431 in the previous year, an increase of 13 per cent. The increase was chiefly in North and South Vellore, North Salem and Trichinopoly and was due to better supervision.

(*b*) AGENCY OF EXPLOITATION.

(i) *Departmental Agency.*

31. The contract system being generally in force the quantity of timber and fuel, the number of bamboos and the value of minor produce extracted departmentally were respectively 4·98, ·03 and ·08 per cent. of the total outturn. Transport was entirely done by country carts.

Timber — 10,761 cubic feet. Decrease was due to the stoppage of timber operations in North and South Salem divisions, pending preparation of working plans.

Fuel — 2,502,401 cubic feet due to the introduction of contract system in all the districts.

Bamboos — 195,022 due to sale of bamboo blocks to contractors.

Minor produce — Rs. 633 due to no sales of Divi Divi pods.

(ii) *By purchasers.*

32. *Timber* — 67,998 cubic feet. Due to poor sales of trees on darkhast lands in North Vellore and Tinnevelly.

Fuel — 1,204,595 cubic feet. Decrease was due chiefly to the fact that contractors failed to complete fellings in their coupes.

Bamboos — 7,939,569. Decrease was due in South Vellore and North Salem to less work by contractors and also to suspension of contracts for irregular work. In North Vellore, South Salem and Madura, removals by purchasers were low, reasons for which have not been reported.

Minor produce + Rs. 82,447.—Increase was generally due to better sales.

(iii) *Rights and privileges.*

33. The only rights allowed were for grazing at reduced rates in North and South Vellore and removal of thatch grass to the value of Rs. 80 in South Arcot. Tree-tapping is also allowed in Tinnevelly, the value being Rs. 740 against Rs. 725 in the previous year.

(iv) *Free grants.*

34. The estimated value of free grants was Rs. 16,250 against Rs. 5,341 in the previous year. The increase was chiefly due to the free removal of grass in North Vellore which is valued at Rs. 7,500 and in Trichinopoly, to the supply of a large quantity of material to the Public Works Department for rebuilding groins and korambus in the river Cauvery.

35. The quantity and estimated value of produce removed by right holders and free grantees are shown in the following abstract :—

—	Timber.		Fuel.		Bamboos.		Grass and grazing.	Other minor produce.	Total value.
	Cubic feet.	Value.	Cubic feet.	Value.	Number.	Value.	Value.	Value.	
		Rs.		Rs.		Rs.	Rs.	Rs.	Rs.
Right holders	..	..	20	1	..	..	..	820	821
Free grantees	32,276	4,018	104,301	1,684	26,441	232	7,965	2,351	16,250
Grants at reduced rates ..	..	..	..		..	..	1,793	..	1,793
Total ..	32,276	4,018	104,321	1,685	26,441	232	9,758	3,171	18,864

(*c*) OUTTURN AND SOURCES OF FOREST PRODUCE.

36. The total outturn is given in the following abstract :—

Agency of exploitation.	Timber including sandalwood in cubic feet.		Fuel in cubic feet.		Bamboos in number.		Minor produce including grass and grazing in rupees.	
	1911-1912.	1912-1913.	1911-1912.	1912-1913.	1911-1912.	1912-1913.	1911-1912.	1912-1913.
1	2	3	4	5	6	7	8	9
							RS.	RS.
By Government Agency.	43,296	32,535	2,856,449	354,048	199,304	4,282	1,066	433
By purchasers ..	1,051,227	983,229	7,463,960	6,259,365	20,600,461	12,660,892	4,25,424	5,07,871
By right holders ..	..	..	20	20	..	..	2,431	320
By free grantees ..	50,672	32,276	1,852	104,301	24,970	26,441	531	10,316
Total ..	1,145,195	1,048,040	10,322,281	6,717,734	20,824,735	12,691,615	4,29,452	5,19,440

The variations have already been explained. The rates for grazing fees levied in the several districts are shown in Form No. 74. The number of animals licensed on payment is 1,312,568 against 1,117,489 in the previous year.

CHAPTER III.—FINANCIAL RESULTS.

37. The revenue and expenditure of the year are compared with those of the previous year and the average of the preceding quinquennium in the following abstract :—

——	1912-13.	1911-12.	Average of preceding five years.
	RS.	RS.	RS.
Revenue	14,08,192	13,81,690	12,89,376
A. Conservancy and Works including refunds.	2,88,401	4,23,562	4,44,504
B. Establishment	3,61,052	3,50,976	2,86,232
Total Expenditure ..	6,49,453	7,74,538	7,30,736
Surplus	7,58,739	6,07,152	5,58,640

Compared with the previous year, there was an increase of Rs. 26,502 under revenue and a decrease of Rs. 1,25,085 under expenditure. Fifty-eight per cent. of the total revenue was derived from major produce, 33 per cent. from minor produce and 9 per cent. from miscellaneous sources. Of the expenditure, 42·6 per cent. was devoted to the upkeep and improvement of the forests, 14·2 per cent. to exploitation and 43·2 per cent. to miscellaneous items. The proportion of net to gross revenue increased from 43·9 to 53·9 per cent. The outstanding revenue at the close of the year was Rs. 2,74,045, of which Rs. 27,944 fell due within the year. The estimated value of timber and other produce at the sale depots at the close of the year was Rs. 29,845 against Rs. 41,144 at the commencement of the year, showing a decrease of Rs. 11,299 during the year.

The chief variations between the actuals of the year and those of the previous year are explained below :—

RECEIPTS.

(i) *By Departmental Agency.*

	RS.	
Timber ... ... —	1,552	Due to the introduction of contract system in all the districts.
Fuel ... ... —	1,78,961	
Bamboos ... ... —	2,931	

Sandalwood + 73,404.—Due to the extraction of a larger quantity of sandalwood and very good prices realized in local sales.

Minor produce — 338.—Calls for no remarks.

(ii) *By Purchasers.*

Timber + 21,895.—Due to the larger amount realized by sale of timber trees in Cumbum, Madura district, and small increases in other districts.

Fuel ... ... +97,210 } Due to the lease of fuel and bamboo
Bamboos ... ... +12,154 } coupes to contractors.

Grazing + 25,155.—Due to larger collections as explained in paragraph 30 *supra.*

Minor produce — 17,232.—Due to the reasons given in paragraph 27 *supra.*

(iii) *Miscellaneous (including confiscated draft and waif-wood).*

Revenue — 2,302.—Calls for no remarks.

EXPENDITURE.

A. Conservancy and Works.

The expenditure fell short of the previous year by Rs. 1,23,195 which was due chiefly to the introduction of the contract system in all the districts.

B. Establishment.

The expenditure exceeded that of the previous year by Rs. 10,076. The increase was chiefly due to the existence of the Direction office and North Vellore District Forest office during the whole year and to payment of grain compensation allowance throughout the year in all the districts.

CHAPTER IV.—ADMINISTRATION.

38. *Circle Charge.*—Mr. J. S. Battie was in charge of the Circle throughout the year.

New District Forest Charges.—The District of Rāmnād was abolished as a separate forest division, Tinnevelly and Rāmnād forming one charge from 1st July 1912.

New ranges.—The formation of the new Cauvery range was approved in G.O. No. 1046, Revenue, dated 8th April 1913.

Establishment.—During the year a further reduction was made in the scale of temporary establishment owing to the transfer of working of coupes to contractors. In South Arcot, guards' beats were re-arranged and the number of watchers was reduced from 164 to 100, it being considered inadvisable to retain so many irresponsible and low-paid men. Further reduction in the temporary establishment is now being considered in other districts.

39. *Work of Superior Officers.*—The following remarks have been made by Collectors:—

By *Mr. N. E. Marjoribanks, North Vellore.*—"Mr. Hearsey discharged his duties with his usual keenness." *South Vellore.*—"None of the officers was in charge long enough for anything definite to be reported about his work." *South Arcot.*—By *Mr. Aziz-ud-din Sahib.*—"Mr. A. B. Myers worked satisfactorily throughout the year." *Salem.*—By *Mr. J. P. Bedford—North.*—"Mr. Clear was in bad health while in charge of the district. Mr. McCarthy had to deal with the exceptional difficulties and new proposals caused by the change in procedure (Departmental felling to contract system) and has shown great zeal and ability in doing so. The financial results by no means do him justice" *South.*—"Mr. E. C. M. Mascarenhas has been District Forest Officer from 1st July 1912 to 30th June 1913. He has had to introduce the new contract system for disposing of fuel and has managed to do it without friction and with fair financial success, and for this I think that he deserves credit." *Trichinopoly.*—By *Mr. L. E. Buckley.*—"Mr. Thornton worked with his usual energy and did good work in opening up the Kollimalais. I have found Mr. Gajaraja Mudaliyar a promising officer." *Tanjore.*—By *Mr. R. B. Wood.*—"Mr. Thornton had little work to do, but what there was he did with his usual energy." *Tinnevelly.*—By *Mr. J. C. Molony.*—"Mr. Peake did not spare himself throughout the year; but he seems to have been singularly unfortunate with his office. I trust that the improvement which he predicts will come to pass." *Rāmnād*—By *Mr. A. R. Loftus-Tottenham.*—"Mr. Peake worked with his usual untiring assiduity and did some very thorough and useful touring in the Srīvilliputtūr Range. I think he is hampered—like others in this part of the world—by an ill-trained office."

I would add that Mr. McCarthy in North Salem and Mr. Scot in Madura have worked hard and done very good work.

40. *Executive establishment.*—Rangers Devadasan and C. A. Ramakrishna Ayyar are especially commended for good work and Mr. Cornwell's field work was conducted with energy and intelligence. The work and conduct of Deputy Rangers with a few exceptions was unsatisfactory. In South Vellore, the services of an acting Deputy Ranger were terminated for incompetency and neglect of duty. In South Arcot, one Ranger was suspended and transferred for gross neglect of duty. In South Salem, the services of a probationary Ranger and a probationary Deputy Ranger were terminated. In Trichinopoly, the work of Ranger C. Rajagopal Nayudu was condemned and a probationary Deputy Ranger was reverted to his permanent appointment of Forester. In Madura, one Ranger was dismissed for falsification of accounts and misappropriation of Government money, and for a similar offence another Ranger was suspended. Final orders have not been passed in his case. In this district, the services of a Deputy Ranger were also dispensed with for neglect of duty. In Tinnevelly, one Deputy Ranger was suspended.

41. *Protective establishment.*—The conduct of the protective staff continues to be unsatisfactory. In North Salem, one Forest Guard is under trial for connivance in a forest offence. In the districts, two Foresters were reduced, three Foresters and 66 Forest Guards and 148 watchers were dismissed or removed from service. Three Foresters, 77 Forest Guards and 63 watchers were suspended. From Tinnevelly, it is reported that some promising Foresters have been recruited.

42. *Ministerial establishment.*—Work was generally satisfactory in all offices except North Vellore and Tinnevelly. In North Vellore, there were constant changes and little control. Work has been very unsatisfactory and arrears have been allowed to accumulate. In Tinnevelly also there have been constant changes resulting in great delay in the disposal of work.

43. *Health of establishment and casualties.*—The health of the establishment was fair in all districts except on the Javadis in South Vellore, on the Pachamalais and Kollimalais in Trichinopoly and on the Ghat forests of Srīvilliputtūr Range in Tinnevelly. Seven Forest Guards, one peon and five watchers died. In Madura, one watcher was murdered while carrying tapals. The Police reported the case as undetected. In Tinnevelly, a Forest Guard was missed and his body was found some days after suspended from a tree in the forest. The Police could make nothing of the case. Eventually a relative of the deceased filed a complaint against a Forester and some others who were tried and discharged by the Magistrate. As the deceased was reported to be of immoral conduct, if he was murdered, it was probably on account of his private conduct.

44. *Relations between Revenue and Forest Officers* continued to be cordial throughout the Circle. The reports of North Salem and Trichinopoly do not furnish information regarding attendance at jamabandy. In Tinnevelly, it is reported that it is not usual for Forest Officers to attend jamabandy. In all other districts, the Range Officers attended and no complaints of any importance were brought to notice.

45. *Service books* are reported to have been maintained and verified in all the districts.

46. *Conservator's inspections.*—One hundred and ninety-six days were spent in camp. All the districts were visited and all the District Forest Offices inspected.

47. *Touring of District Forest Officers.*—All the District Forest Officers except Tinnevelly spent more than six months in camp. The touring of the District Forest Officer, Tinnevelly, fell short of the prescribed minimum by twenty-five days and this is attributed to his long stay at head-quarters to clear off arrears of office work.

48. *Inspection of Range offices.*—All the Range offices were inspected except one in South Vellore and three in Tinnevelly. These three offices in the latter district were, however, inspected after the close of the year.

49. *Audit of accounts of District Forest offices.*—The accounts of all the District Forest offices were audited by the Auditors of the Accountant-General's office and the results were reported to be satisfactory.

50. *Imperial Forest College, Dehra Dun.*—One Deputy Ranger returned with a Ranger's certificate. One probationer for the Provincial service was under preliminary training in North Salem division and has since been deputed to the College.

51. *Madras Forest College, Coimbatore.*—Of the eight candidates deputed in the previous year, one Ranger absented himself without permission on plea of illness and was sent back, one Deputy Ranger died and the remaining six are undergoing training. During the year, two Rangers and two Deputy Rangers were deputed for the course commencing from 1st July 1913.

52. *Vernacular Training school.*—The school was again held in South Salem. Out of 28 students admitted, 26 went through the course successfully, eight in the first class, 16 in the second class and two in the third class. Two were sent back to districts, as they were found unfit for the practical course. The men sent up for training were, with a few exceptions, a poor lot, and the attention of the District Forest Officers has been called to this matter.

CHAPTER V.—GENERAL.

53. *Realization of Revenue from the usufruct of toddy-yielding trees.*—The revenue realized was Rs. 11,513 against Rs. 11,262 in the previous year. The fixed fee system was generally in force. In South Salem, usufruct of trees not taken up under the fixed fee system was leased as usual and the amount realized was Rs. 2,560 against Rs. 3,345 in the previous year.

54. *Measures adopted to encourage the growth of manure-leaf-yielding trees and shrubs.*—The experiments conducted in South Arcot, Trichinopoly and Madura districts for the cultivation of *Sesbania aculeata* for production of seed are referred to in paragraph 20 *supra*. In North Vellore, seed of manure-leaf-yielding species especially *Sesbania aculeata* was sown in ten different localities but without success. It has been found that *Sesbania* did well only on ground that was well ploughed and kept clear of weeds and grass. The experiments conducted in South Vellore were successful. Fifty measures of seed were collected and a portion was distributed to ryots. In North Salem, seed was sown over 9 acres. The experiment proved a failure as the operation was started too late It is reported that there is no demand anywhere in the division for manure leaves, though there seems to be illicit removal of leaves in some reserves. The right to cut leaves in Giddamangalam manure leaf farm was twice put up for sale, but there was no bid. From South Salem it is reported that the ryots did not avail themselves of the concession of taking lands on cowle tenure for cultivation of leaf manure. As the right for the removal of manure leaves was included in the minor produce leases up to the end of the previous year in Tinnevelly, departmental issue of permits commenced only during the year under report, and was limited to specified areas of moderate size instead of the whole forests. Owing to the enhanced rates, the collection of leaves from reserves has been very much reduced in all districts.

55. *Grant of cowles for the formation of Casuarina plantations in sandy areas.*—No applications for such concessions were received In South Arcot, large areas of private lands have been planted up by the ryots, and the industry is well established.

56. *Cultivation in reserved forests.*—In South Vellore, North and South Salem, leases of previous years were renewed. In South Arcot, the Salvation Army was granted a lease of about 852 acres in Kammapuram reserved forest on a nominal annual rent of Rs. 5. With a view to the permanent assignment of the land, a notification for disafforestation has been submitted to Government. In Trichinopoly, excess areas found on survey of certain admitted enclosures were granted as leases. In the Lower Palnis of Madura, areas under cardamom and coffee cultivation under muchalikkas were surveyed in connection with the investigation of the reserves by the Special Deputy Collector. Eviction was ordered in cases of cultivation beyond the limits of areas leased and the crop was sold.

57. *Improvement of water-supply in State forests.*—In South Arcot, three tanks in reserves were repaired at a cost of Rs. 516. In North Salem, bunding streams on the plateau of the Nagaramalai reserve was carried out at a cost of Rs. 300.

58. *Supply of forest produce to meet the wants of the people.*—In North Vellore, permits were, as usual, issued for manure leaves in all Ranges and free removal of grass was allowed for *bonâ fide* domestic purposes. *South Vellore.*—Forty-two fuel and 27 bamboo coupes were sold to contractors and there was no difficulty in meeting the demand. In South Arcot, the wants of the people were met from the coupes worked by contractors who were bound to sell fuel, etc., at certain fixed rates. In North Salem, 16 fuel coupes and 17 bamboo blocks were leased to contractors. There is still

difficulty in getting good contractors in Salem and the District Forest Officer states that the only alternative is departmental fellings. I do not agree with this Contractors in Salem find it difficult to compete against illicit removals from reserves and unreserves and also from Mitta forests. Besides, departmental works by supplying produce in reality below cost price, had ruined the market and as something like the old rates still prevail, contractors find it difficult to make a profit. What Salem wants is better protection. No doubt there are reasons which make efficient protection a difficult matter in this district but these difficulties, I have no doubt, could be overcome. Mitta forests and unreserved lands cannot be a permanent feature of the situation and the existing system will not raise up a formidable and enduring competition. Better protection not only of the unreserves but of the reserved forests is what is wanted, and from what has been done lately in the district I believe matters will gradually improve. In South Salem, seven village depots supply the wants of the agricultural population. It is observed that the demand was not so keen owing to sales by coupe contractors. In Trichinopoly, coupes were leased out to contractors and permits were issued for minor produce. In Madura and in Tinnevelly, coupe contractors supplied the local demand by keeping depots in or near the forests.

59. *Sale of fuel at the edge of the forests.*—In South Vellore, a small quantity of fuel and 22 tons of charcoal were disposed of at the edge of the forests. In South Arcot, 2,943 tons of billet wood, 304 tons of roots and 5,300 head loads of twigs were felled departmentally, stacked and sold by auction in lots in the coupes of the Coast Casuarina plantations. In Trichinopoly, coupe contractors were bound to sell fuel at the edge of the forests at prices fixed.

60. *Arrangements made for the transfer of sale depots to private agency.*—There are no sale depots in the districts, coupes were sold standing. There were no offers for working coupes in Musiri range, Trichinopoly district. One coupe was therefore worked departmentally for the purpose of teaching contractors and coolies the system of working.

61. *Free removal of grass.*—This has already been referred to in paragraph 28 *supra*. From North Vellore it is reported that in many localities grass was entirely removed, stopping all fear of fires In South Vellore division, free removal was permitted from 11 reserves. The results, it is reported, show that there is a great demand for the produce, and that there is no fear of fire occurring as the result of cutting during the fire season.

62. *Hill tribes.*—As usual, the Malayalees living in the Javadi hills in North and South Vellore were allowed grazing at half rates. In return they are expected to prevent forest fires, and generally assist the forest subordinates in the protection of the forests. From North Vellore, it is reported that these obligations were generally carried out. *South Vellore.*—On account of their local knowledge they are found to be useful as watchers, but as forest guards they are not a success, being illiterate and seldom taking kindly to discipline. As regards the obligations imposed in return for grazing at reduced rates, it may be said that they have been generally carried out, but they still hack bamboos. In two nads, the grazing fee was raised to $\frac{3}{4}$ of the full rate for non-observance of the obligations, but in another nad it was reduced to $\frac{1}{4}$ of the full rate for satisfactory observance of the obligations. These Javadis rules have at the request of the local Malayalees been extended to the Yelagiris. *North Salem.*—In order to obtain the co-operation of the Malayalees in the protection of the forests from fire, a scheme for allowing 150 cattle to graze free in the neighbourhood of Sanniyasimalai on condition of closing the reserve if fire occurs is being tried. In Trichinopoly, Malayalees were freely entertained as forest guards and watchers and they assisted in protecting the forests from fire. *Tinnevelly.*—Of the 10 acres of land allotted to the Kanis for planting teak in the previous year, 8 acres were planted. Planting was rather belated, but 1,800 seedlings out of 3,000 planted are alive. The rest of the area was cleared late and dibbled with seed which has germinated In the second compartment allotted for planting during the year under report, only 5 acres have been cleared and, as seedlings were not ready and the rains were poor, a small bit of the cleared area has been planted. It is too soon to forecast the success of these operations. Two men were appointed as watchers but very soon resigned. A scheme for departmental collection of minor produce through the Kanis and supplying them with food-stuffs to the amount of value of produce collected instead of money payments, is to be tried in the current year.

63. *Prospecting licenses.*—No license was granted during the year.

64. *Timber and Sandalwood transit rules.*—The rules worked satisfactorily. Revised rules for transit of timber in South Vellore and the extension of Sandalwood transit rules to the Pachamalai hills in Trichinopoly were sanctioned during the year. The further report from Madura called for by the Board in its Proceedings, Forest No. 537, Mis., dated 29th March 1912, and referred to in the previous report has been submitted. In Tinnevelly, certificates of registration of the property marks of traders in Travancore timber and of owners of enclosures in the Srīvilliputtūr Ghat forests were issued. There was an inordinate number of applications for registration of property marks from owners of patta lands, and certificates of registration were refused in several cases.

65. *Rules under section 26 of the Forest Act.*—The rules generally worked satisfactorily and no complaints were brought to notice. From South Arcot, it is reported that the influential and intelligent class of ryots in one taluk have a tendency to monopolise or take a much larger quantity of produce than is actually necessary and that the matter of fixing the quantity in accordance with the extent of patta holdings is under consideration.

66. *Rules regarding levy of composition fees.*—Attention was paid to the rules in fixing the amount of composition fees.

67. *Arrangements made in holding the villagers adjacent to particular forests responsible for protection of those forests by dividing the village and blocks of forests concerned—North Salem.*—As crime proceeded from bad to worse in spite of warning and notification calling attention of neighbouring villagers to their responsibilities, steps are being taken to close certain reserves to grazing. *Trichinopoly.*—The system was tried in one reserve of Musiri range and was very successful.

Live and Dead Stock.

68. *Live-stock.*—The two bullocks employed for baling water in Chenur plantation of North Vellore division are reported to be in good health. It is proposed to dispose of the animals

69. *Inventory of valuable stock.*—Stock registers are reported to have been maintained in all districts and verified at inspections.

70. *Rain-guages.*—In all the districts readings are reported to have been properly recorded. In North Salem, one guage was stolen and replaced, but one of the bottles of the new guage was then broken soon after by somebody in order to get the local subordinates into trouble. In South Salem, it is proposed to open two new stations. In Tinnevelly, a guage badly placed in the plains two miles from the hills was removed and set up on the hills at 3,000 feet elevation.

71. *Specimens—South Vellore.*—Teak specimen was sent to the Forest Economist and seeds of *Santalum album* and its associates were sent to the Forest Botanist. Bamboo seeds and leaves, flowers and fruit of trychnos Nux-Vomica were sent to the Botanical Survey of India Office. *Trichinopoly.*—Mucuna plant was sent to Sibpur Gardens. *Tinnevelly.*—Some Termites were sent to the Forest Zoologist. Wood and botanical specimens of *Dalbergia spinosa* were sent to the Economic Botanist, Calcutta; specimens of the above as well as of *Mimusops hexandra* and wood specimen of *Filicium decipiens* were sent to the Gass Forest Museum. Some earth-snakes were sent to Mr. George E. Mason of London.

Suits.

72. *South Vellore.*—One P. Lanakōti Pillai has instituted a civil suit for recovery of Rs. 998-9-6 alleged to be due to him for the construction of subordinates' quarters, etc., at Kottur on the Yelagiris. *South Arcot.*—A civil suit has been filed for damages against Ranger B. T. Sītārāma Ayyar and two subordinates by an accused person in a forest offence who was convicted and whose conviction was reversed on appeal. The suit is being defended by Government. *North Salem.*—A road contractor has given notice of suits in respect of some works done in 1908. The Government Pleader is of opinion that the suits can be defended. *Trichinopoly.*—The hearing of the suit instituted by N. Subbarāma Ayyar, late depot-keeper, and referred to in the previous year's report was closed, but judgment was not pronounced. *Tinnevelly.*—The Chinnakadu hill suit was decided in favour of Government. It is understood that an appeal is being made. The party in the Kuttalam Waterfall suit has moved for an appeal to the Privy Council.

Office of the Conservator of Forests,
Southern Circle,
Trichinopoly, dated 12th September 1913.

J. S. Battie,
Conservator of Forests,
Southern Circle.

INDEX.

FOREST ADMINISTRATION REPORT,

MADRAS PRESIDENCY,

WESTERN CIRCLE, 1912–1913.

Chapter.	Subject.	Paras.
I	Constitution of State forests—	
	1. Alteration in area	1
	2. Forest settlement	2
	3. Demarcation	3
	4. Forest surveys	4 & 5
II	Management of State forests—	
	1. Regulation of management—	
	(a) Preparation and control of regular working-plans ...	6
	(b) Preliminary working-plans reports	7
	(c) Annual plan of operations	8
	2. Communications and buildings—	
	(a) Roads and bridges	9
	(b) Buildings	10
	(c) Miscellaneous works	11
	3. Protection of forests—	
	(a) General protection	12 to 14
	(b) Protection from fire	15 to 17
	(c) Protection from cattle	18
	(d) Protection against injuries from natural causes ...	19
	4. Sylviculture—	
	(a) Natural reproduction	20
	(b) Artificial reproduction	21
	(c) Operations for improvement of the growing stock ...	22
	(d) Experiments	23 & 24
	5. Exploitation—	
	(a) System of management—	25
	(i) Major forest produce	26 to 29
	(ii) Minor forest produce	30 to 33
	(b) Agency of exploitation—	
	(i) Departmental agency	34 & 35
	(ii) By Purchasers	36
	(iii) Right-holders and (iv) Free-grants ...	37
	(c) Outturn and sources of forest produce	38
III	Financial results	39
IV	Administration	40 to 55
V	General	56 to 66
	Appendices A to F and Forms Nos. 65 to 85.	

FOREST ADMINISTRATION REPORT OF THE WESTERN CIRCLE

FOR THE

FOREST YEAR ENDING 30TH JUNE 1913.

LIBRARY OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY

CHAPTER I.—CONSTITUTION OF STATE FORESTS.

1. Alteration in Area.

Reserved forests.—The principal variations were—

(*a*) An addition of 45 square miles by transfer from reserved lands and of two square miles by the adoption of Survey of India figures.

(*b*) One square mile was reduced by rounding off fractions and three small areas aggregating 226 acres were disafforested.

The total area increased from 3,774 to 3,820 square miles.

Reserved lands.—Eleven square miles were newly constituted and 25 square miles were added by the adoption of Survey of India figures; 45 square miles were transferred to reserved forests, two square miles were excluded at settlement and 98 square miles in *South Canara* were transferred to unreserved land. The area at the close of the year was 432 square miles of which five square miles are toda patta lands in the *Nilgiris*.

2. Forest Settlement.

2. One block in each of *Kollegal* and *North Coimbatore*, two blocks in *South Canara* and four in *Central Coimbatore* were finally settled during the year. Fifteen blocks of which ten are small enclosures, aggregating 11 square miles were brought under settlement. The actual settlement of six out of the twenty-four blocks, shown as balance under settlement at the close of the year was completed. The draft notification for Madeswaranmalai in *Kollegal*, the oldest of the pending blocks, was pending revision and has been sent up for publication since the close of the year.

3. Demarcation.

3. Eighty-nine miles of boundaries were permanently demarcated and 94 miles of the existing boundaries repaired at a cost of Rs. 2,726 and Rs. 1,376 respectively. The length of boundaries cleared, repaired or stone-lined, free of cost by subordinates is reported to be 1,202 miles in all districts except *Malabar*. In *South Canara* and the *Nilgiris* the subordinates continued to clear the boundaries as part of their normal work but no accurate record of the results was maintained. The boundaries of the forests in *Kollegal* are being substantially demarcated in accordance with the verification by the Special Deputy Collector; the lengths of boundaries have therefore been reclassified and revised figures are furnished in the return. Fifty-seven miles in *North Coimbatore* were demarcated at a cost of Rs. 2,168 with reference to the verification above referred to. In *North* and *South Malabar*, 169 and 62 miles respectively were as usual cleared for the purpose of fire protection, the cost being debited to that head.

4. Forest Surveys.

(*a*) *By the Survey of India Party.*

4. The Survey of India Party No. 7 surveyed on the two-inch = one mile scale two reserved forests in *Kollegal* aggregating 11·61 square miles.

(*b*) *By Departmental Survey.*

5. The survey of timber, fuel and bamboo coupes of the year was carried out departmentally. Sixty-five miles of boundaries of reserved forests in *Kollegal* and the traces of one road in *Kollegal* and two bridle-paths in *Central Coimbatore* and the alignment of nine miles of cart roads in *South Coimbatore* were also surveyed. A special officer of the Madras Survey Department was deputed to survey the boundaries of estates newly leased out on the Anamalais. He worked in the field for about two months and had to stop further work on account of the unfavourable climatic condition; he will resume field work about November 1913.

The maps referred to in section 80 of the Forest Code are reported to have been maintained in all districts.

Special District Reference Maps—Preparation.—The Forest Map Officer prepared the special reference maps of the forest divisions of *Kurnool*, *Bellary*, *Anantapur*, *North Malabar*, *South Arcot*, *South Vellore* and part of the map of *Trichinopoly* cum *Tanjore*.

Progress in publication.—The maps of *South Canara* and the four divisions of *Coimbatore* were in the press and the map of *the Nilgiris* was being fair-drawn in the Forest Map office at Dehra Dun at the close of the year.

CHAPTER II.—MANAGEMENT OF STATE FORESTS.

1. Regulation of Management.

(*a*) *Preparation and Control of Regular Working Plans.*

6. *Preparation.*—No new plans were sanctioned. The revised working plan for Beypore tope in *South Malabar* was sanctioned. The District Forest Officer, *Central Coimbatore*, prepared revised working plans for the forests of Mēttupālaiyam range (97 square miles) and for Tadagam reserved forest (47 square miles) and the District Forest Officer, *the Nilgiris*, completed the plan for the Eucalyptus plantations. The collection of statistics for working plans for the Gundal and Doddahalla valleys in *Kollegal* was continued.

Control—South Canara.—Schemes for creeper-cutting and girdling inferior species of woods were prescribed for Doddinamane, Nidle, Nerankimale and Herur reserved forests. Nujinane fuel coupe XVII was not worked as the transport road was not completed. *North Malabar.*—A revised scheme for felling Chedleth timber coupes spreading over eight years against three originally prescribed was sanctioned. Coupe XVII of Begur was worked instead of XX as the felling was in arrears. *South Malabar.*—The planting in Karimpoya and Nilambur plantations was stopped owing to the inadvisability of clear felling the areas stocked with valuable trees, to the scarcity and increase in cost of labour and to the formation of swamps in the valuable natural forests. Old sample plots were abandoned as they serve no useful purpose. Two weedings were made against three prescribed in Beypore tope as the work was commenced late. *Kollegal.*—Coupe V of Araipalaiyam was not completed owing to a large stock of fuel remaining undisposed of. The felling of sandalwood in Bailur coupe was behindhand owing to removal of spiked trees in coupes II and IX. Coupe I of Madeswaranmalai was again worked this year for removal of spiked trees and also coupe II and a portion of coupe III. *North Coimbatore.*—The Talamalai working plan remained as usual unworkable. *Central Coimbatore.*—The timber coupes in tank beds as per Erode range working plan were not worked as the Public Works Department claimed ownership of the areas; the dispute was decided in favour

of the Forest Department. Hay-making was not carried out owing to the unfavourable season. The Sholakarai and Walayar working plan was adhered to except as regards working bamboo areas which were leased out during 1910–11 when all bamboos flowered and seeded. Chinnar working circle was worked according to the provisions of the Bolampatti working plan; the rest of this plan and that for Mēttupālaiyam range are unsuitable and unworkable. *South Coimbatore.*—Talinji working plan was set aside as unworkable. The prescriptions of the Mount Stuart working plan were not carried out and the felling in Tekadi coupe was not completed for want of establishment and labour.

(*b*) *Preliminary Working Plans Reports.*

7. *The Nilgiris.*—The clearing of inspection paths at Benne and the construction of a camp at Doddahatti were not begun for want of labour. Nine fuel, eight bamboo and three sandalwood coupes in *North Coimbatore* and three fuel coupes in *Kollegal* were worked under systematised working; valuable data are thereby being collected for the preparation of working plans.

(*c*) *Annual Plan of Operations.*

8. Besides the deviations mentioned under (*a*) and (*b*) the only important deviations were—*South Canara.*—Charcoal was not manufactured in Puttur and Uppinangadi ranges owing to want of demand. The Shiroor-Kadike and Hulimi-shepere-Heroor roads and the guards' huts at Kombar and Adoor were not constructed for want of funds. *North Malabar.*—Begur coupe XVII was felled departmentally as no purchaser for the standing coupe could be found. *South Malabar*—Pulimunda bridle-path was not constructed as the serambi at Pulimunda has not yet been commenced. The serambi at Nedungayam was not constructed as it was not required. Nelikal bridle-path, compartment roads, serambi at Padukai, kitchen at Walghat and reconstruction of Tiruvizhamkunnu serambi were postponed for want of funds. The preparation of working plans for the natural forests was postponed as the District Forest Officer could not find time to do it unaided. The following works though not provided for were found necessary and carried out: tracing ten miles of bridle-path in the Silent valley, metalling Nedungayam-Chanakundumukku and Nedungayam-Mundakadava roads, construction of a bungalow at Poochipara in the Silent valley and serambi at Karimpoya, sinking a well at Kariem and permanent demarcation of Panakadan reserved forest. *The Nilgiris*—Thorapalli-Mudumalai road was only partly constructed for want of labour. The construction of a range camp at Kargudi and subordinates' lines at Bandishola and the fixing of a hydraulic ram for supply of water to the Kargudi camp were not completed as they were commenced late. *Kollegal*—coupe VI of Gundal and Chickailur were not felled, coupe V not being completed. Chickailur-Singanallur road, the upper portion of the Gundal valley road, depot at Kollegal, subordinates' lines at Mathipuram, rest-house at Ponnachi were not taken up for want of establishment and funds. The sinking of a well at Lokanhalli was deferred in favour of the incomplete wells of last year. *North Coimbatore*—Palamalai sandalwood coupe II was not felled as coupe I was commenced only during the year under report. Uginium-Oshatti road, rest and out-houses at Oshatti, sinking a well at Sengolam and permanent demarcation of Hasanur enclosures and Pachapalimalai and North Bargur reserved forests were put off for want of funds and establishment. Felling fuel in Pachapalimalai coupe I, construction of Attani-Varacombai cart-track and sinking wells at Tattakarai, Attani and Chikhalli were carried out although these were not provided for. *Central Coimbatore*—Kandiyur fuel coupe VI was not felled owing to non-disposal of fuel felled in the previous coupe; Narasapuram coupe I was not sold as it would interfere with the future working as per proposed working plan. Anaiarkandi-Muthikolam road was not constructed owing to delay in the preparation of estimates and plans. Elival, Doni and Anaimulli-Chindakki bridle-paths were deferred, the former in favour of urgent works and the latter owing to non-completion of the trace and to the site not being acquired. Subordinates' lines at Tholampalayam were postponed for want of funds. The enclosures in some reserved forests were not acquired owing to dolay in valuing them by the Revenue Department. Removal of prickly-pear

from coupe VII Chennimalai was put off pending results of previous years' operations. *South Coimbatore*—felling Tekadi coupe XXXVI and creeper-cutting and improvement fellings in Ulandi coupe I were not carried out for want of establishment. Kottur fuel coupe XV was not worked, the previous coupe not being completed. Repairs to Tekadi cart-track, extension of tramline to Peruvari and construction of Deputy Ranger's quarters at Anaipadi were deferred pending orders on the proposed Tekadi tramway. Aliar road and serambi and subordinates' lines at Ulandi were pending selection of sites and further scrutiny. Platform for a crane at Anaipadi and bullmen's quarters at Sethumadai were not constructed as they are not required. Lower Punachi cart-track and branch road to Manthorai were not taken up owing to delay in preparation of estimates. Subordinates' lines at Sethumadai, Attaikatti and Kurumalai were given up in favour of urgent works. The Varigalli valley road was not extended to topslip as the work on the original road is very much behind hand. Dam at Talinji was pending further investigation. Construction of a cart-track to the bungalow at Kombu and subordinates' lines at the same place and some minor works not provided for were carried out.

2. Communications and Buildings.

(*a*) *Roads and Bridges.*

9. The amount expended on new works was Rs. 15,626 against Rs. 18,855 in the previous year, while Rs. 30,975 were expended on repairs against Rs. 43,556. The important new works of the year were :—*South Canara*—Construction of four and a quarter miles of road for transport of fuel. *North Malabar*—making a trace of Kottiyur-Dindimal road 7¼ miles in length and construction of eight bridges on the Kottiyur road. *South Malabar*—Metalling parts of two roads at a cost of Rs. 2,668. *The Nilgiris*—Completion of the bridle-paths in North and West Moyar reserved forests. *Kollegal*—Completion of Chengudi-Hosur road and tracing five miles of Singanallur-Lingamankarai road. *North Coimbatore*—Construction of six miles of cart and five miles of ghât roads. *South Coimbatore*—Rs. 1,048 was spent on the Varigalli valley road; progress was poor owing to failure of the contractor.

Tramways.—The proposed Wynaad tramway was abandoned. The working of the tramway in *South Coimbatore* showed a net profit of Rs. 2,712 against Rs. 1,789 in the previous year and the working charges fell from Rs. 1-11-7 to Rs. 1-7-1.

Telephone.—Telephone lines were erected in *South Coimbatore* between Anaipadi and Anamalai *viâ* Mount Stuart and Sethumadai and from Sethumadai to Tekadi. The telephone connections were most useful and about 400 messages were recorded as sent during the year; almost the first message sent saved 24 hours delay in taking an elephant out of a pit. The annual rent for the installation is Rs. 699.

(*b*) *Buildings.*

10. The principal new works of the year were.—*Range offices*—Two in *North Coimbatore* and one in *Central Coimbatore*; one in *Kollegal* was commenced; *Rangers' quarters*—One in *North Coimbatore. Deputy Rangers' quarters*—*North Malabar* The quarters at Tirunelli and Pavagaddai were completed and those at Kaimaram and Rampur Ford were commenced. *Subordinates' lines.*—Five sets in *North Coimbatore*, two in *South Coimbatore* and one in *South Malabar. Rest-houses*—One in *South Malabar* and one in *Kollegal* were commenced; one at Kargudi in *the Nilgiris* and two in *Kollegal* were finished. Chindakki and Agali bungalows in the Attapadi valley were commenced. The total expenditure on new works and repairs amounted to Rs. 35,938 and 12,610 respectively.

(*c*) *Miscellaneous works.*

11. The total expenditure incurred was Rs. 8,495. The chief works were sinking and deepening wells and fencing compounds of forest stations and rest-houses. A pipe line for supply of water to Kargudi camp in *the Nilgiris* was aligned and pipes and fittings were purchased. Temporary and permanent dams were constructed to train two streams in *North Malabar* for floating timber, fuel and bamboos.

3. Protection of Forests.

(a) *General Protection.*

12. The forest offences of the year compare with those of the previous year as shown below :—

Class.	Injury to forest by fire.		Unauthorised felling or appropriation of wood and minor forest produce.		Grazing without permission or in tract in which grazing is prohibited.		Other offences.		Total cases.	
	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.
Reserved forests.										
Cases taken into Court ..	39	29	307	349	155	159	101	73	602	610
Cases compounded ..	37	49	1,273	1,428	595	622	174	161	2,079	2,260
Cases undetected ..	350	300	2	13	6	1	..	2	358	316
Total ..	426	378	1,582	1,790	756	782	275	236	3,039	3,186
Unreserved lands.										
Cases taken into Court ..	..	2	36	76	..	..	2	4	38	82
Cases compounded ..	2	2	316	514	..	..	15	12	333	528
Cases undetected ..	..	1	1	7	..	..	..	1	1	9
Total ..	2	5	353	597	..	..	17	17	372	619
Grand total ..	428	383	1,935	2,387	756	782	292	253	3,411	3,805

Offences in reserved forests.—There was an increase of 147 offences over the figures of the previous year ; the offences under " illicit felling " and " illicit grazing " increased while those under the two classes decreased. The increase under " illicit felling " was chiefly in *South Canara* due to smuggling of sandalwood from kumaki lands under cover of warg permits, in *North Coimbatore* to better protection and in *Central Coimbatore* to greater vigilence, while that under " illicit grazing " was mainly in *North Coimbatore* attributed to better protection. The decrease under " injury by fire " was general and under " other offences " was marked in *Kollegal* due to better understanding of the timber transit rules by the people.

Of the cases taken into court 93 per cent. ended in conviction against 91 in the previous year and the number of withdrawn cases was exceptionally low, *i.e.*, ·5 per cent. The punishments inflicted by Magistrates are reported to be satisfactory in *South Canara*, adequate in *Kollegal* and *Central Coimbatore* though perhaps not sufficiently deterrent in the former district, not deterrent in *North Coimbatore* and lenient in *North Malabar* ; no comment is made in the other districts.

The number of cases compounded and the fees realized were 1,932 and Rs. 18,964, respectively, against 1,731 and Rs. 15,131 in the previous year. The increase in the amount of fees realized was chiefly in *Kollegal* due to a large number of cattle involved in grazing cases and to imposition of heavy fees in a few cases of illicit fellings and of hunting and shooting and in *North* and *Central Coimbatore* to increase in the number of cases detected and also to levy of heavy fees in goat browsing cases in the last-mentioned district.

Working of the rules for compounding grazing offences.—The rules have worked satisfactorily in *Kollegal* and *Central Coimbatore* and are reported to have been observed in *North Coimbatore*. They do not differ from the existing practice in *the Nilgiris* and were not adopted in *South Canara* and *South Malabar* owing to absence of wholesale illicit grazing in the former district and to closure to grazing of all forests in the latter. In *North Malabar* the rules have no importance owing to sparseness of population and to the existence of a vast extent of unreserved and private lands. No reference is made to this subject in *South Coimbatore*.

The percentage of undetected cases to the total number of offences decreased from 11·7 of the previous year to 9·9 per cent. Ninety-five per cent. of the undetected cases are fire occurrences, which are correctly treated as offences inasmuch as the fires undoubtedly endangered reserved forests. Fires known to have been caused by lightning are of course excluded.

Holding adjacent villages responsible for commission of offences in particular forests.—In *North Malabar* and *Kollegal* notifications defining the forests and villages responsible for commission of offences therein were published. The system was not elaborated in *South Canara* for want of establishment and cannot be introduced in *Central Coimbatore* until the forests are sub-divided into small grazing blocks. It is hardly workable in *the Nilgiris* where the forests are scattered and is not required in *South Malabar*. After due warnings to villages responsible, areas in which offences had become common were closed to grazing for part of the year in *North Coimbatore*; in *South Coimbatore* areas in which there were extensive illicit fellings were closed to grazing.

13. *Offences in unreserved lands.*—The offences of the year increased by 66 per cent. but the increase is purely a paper one, being due to submission of returns by the Revenue Divisional Officers who failed to do so last year. Particulars are still incomplete; in *South Malabar* the offences in the lands under the control of the department alone are reported; no offences are reported by *the Nilgiris* and in *South Coimbatore* only those offences actually dealt with during the year and furnished in the Divisional Officers' quarterly returns are reported, pending cases being unaccounted for. Eighty-four per cent. of the cases taken into court ended in conviction. The number of cases compounded was 519 and the amount of compounding fees realized, Rs. 5,113

14. *Rewards.*—A Deputy Ranger in *South Canara* was granted a reward of Rs. 15 for having detected under difficult circumstances a case of illicit felling of timber from kumaki lands. In *North Malabar* a reward of Rs. 17 was granted to a fire patrol and a contractor in a case of fire. In *Kollegal* one Ranger, one Deputy Ranger, five other subordinates, two subordinates of the Police department and a village munsif were granted rewards aggregating Rs. 138. Sixteen persons in *North Coimbatore* and 12 in *South Coimbatore* were granted rewards amounting to Rs. 77 and 79 respectively for good services rendered in detection of offences; rewards of Rs. 10-8-0 were also granted in the latter district to the informers in four cases of illicit tree tapping.

(*b*) *Protection from fire.*

15. *Special protection.*—The system of protection remained unchanged. The area attempted to be protected was 1,122 square miles against 1,022 square miles in the previous year; the percentage of area which escaped fire was 97 against 93 in the last year. The general results for the circle are satisfactory despite the dry and unfavorable season. The cost of protection per square mile of area attempted fell to Rs. 23-7-6 from Rs. 27-6-8 in the previous year.

16. *General protection.*—The area attempted during the year amounted to 2,501 square miles against 2,526 square miles and the percentage of failure was 1·4 against 8 in the previous year. The registration of fires in these areas continued to be unreliable and several of the actual fire occurrences were not reported. No improvement can be expected until the establishment is strengthened.

17. The number of, and the causes to which, the fires were attributed are given in Appendix D. The number of fires decreased from 490 to 418 and the area burnt was 78 per cent. less than that of last year.

(*c*) *Protection against cattle.*

18. 71·7 per cent. of the total forest area was open to grazing of cattle but closed to goats. The area closed to all animals for the whole year was 740 square miles or 17·4 per cent. against 510 square miles in the previous year, while the area closed for part of the year decreased from 172 to 50 square miles or 1·2 per cent.; the increase closed for the whole year was in *Kollegal* due to recomputation of the areas of certain forests, in *North Coimbatore* to closure of 79 square miles on account of extensive fires, in *Central Coimbatore* to extension of areas under reproduction and in *South*

Coimbatore to the omission of 20 square miles from the last year's return; the decrease in the area closed for part of the year was due to re-opening of certain areas in *Kollegal* and *North Coimbatore* closed to grazing last year. One hundred and seventy-nine square miles were closed to goats and sheep in *South Coimbatore* in accordance with the provisions of the grazing scheme for Udumalpet taluk.

The number of cattle impounded during the year is analysed in Appendix E. The impoundings compared with those of last year increased by 2,737. The fluctuations were chiefly in *Kollegal* and *North Coimbatore* and were mainly due to illegal rescue of cattle in the last year in the former district and to closer supervision in the latter.

(d) Protection against injuries from natural causes.

19. *North Malabar.*—There was a slight attack by a defoliator in the Begur and Chedleth teak plantations, but numerous crows help to keep the pest down. Lantana was uprooted in Begur 1892, 1894, 1895 and 1906 teak plantations and in Neduthanna orange tope. The experiment of planting castor on an area cleared of lantana was continued but no definite results are available. *South Malabar*—The young teak plantations were attacked by *Hyblæa* from 13th September to 10th October, and by *Pyrausta* from 17th November to December; as an experiment a light ground fire was burnt through 8 acres of Nellikutha 1871, and thousands of caterpillars were thus destroyed, but the final result is not reported. More energetic measures are required in order to eradicate these pests. Locust attacks occurred in November 1912 and February 1913 in plantations 1870, 1871 Nellikutha and 1902, 1907 Karimpoya; over 1,000 seers of locusts were collected and destroyed at a cost of one anna per seer. The mahogany borer attacked seedlings on Nilambur hill. A heavy storm on the 22nd July did much damage in the plantations; in Panangode 1886, 133 trees had their tops broken off by the wind; this plantation was exceptionally susceptible owing to the heavy thinning recently carried out. The erosion in Chathamborai 1872 extended slightly, and a high flood in June 1913 caused slight erosion in Eddacode 1846. *Kollegal*—Spike continued to spread in sandalwood areas, in spite of the removal of spiked trees as fast as the establishment can manage it. *North Coimbatore*—Spike invaded two new sandalwood areas; nearly 8,000 dead spiked trees were marked in Hassanur coupes II and III. *Central Coimbatore*—*Hyblæa* and *Pyrausta* attacked teak in Walayar at the commencement and end of the monsoon, but damage was small as teak is not growing pure in these forests. *South Coimbatore*—Lantana is a dangerous pest in Tekadi leased forests and there is not enough labour to thoroughly eradicate it; small areas were cleared partly by coolies and partly by elephants. Loranthus was cut off branches of trees in Gudaravalli working circle.

4. Sylviculture.

(a) Natural Reproduction.

20. *South Canara.*—It was again a bad year for *Hopea parviflora* seed; *Xylia dolabriformis* as usual reproduced well by seedlings and coppice shoots. *Catechu* and *Pterocarpus* seeded well but most seedlings were destroyed by cattle. Teak reproduction by coppice was fair in Muliar fuel coupe, but absent everywhere else. *North Malabar*—Reproduction from seed or rootsuckers of *Anogiessus latifolia*, *Grewia tiliæfolia*, *Pterocarpus Marsupium*, *Eugenia Jambolana*, *Terminalia tomentosa* and *Dalbergia latifolia* was good. Teak reproduction by rootsuckers improved but seedlings were scarce. *Hopea parviflora* seeded well in Kanoth; this is remarkable as it failed in *South Canara*. *Bambusa arundinacea* seeded in Begur and part of Chedleth ranges. *South Malabar*—*Bambusa-arundinacea* seeded in Amarampalam range, and in consequence there will be a scarcity of bamboos for floating for a few years. Reproduction from seed in Nilambur range was good, in Amarampalam range bad. The growth of *Xylia dolabriformis* in third class teak areas in Nilambur is remarkable; *Dalbergia latifolia* seedlings also appeared but were decimated by semi-wild cattle. The thinning of pure mahogany (*Swietenia macrophylla*) patches in Eddacode has had a marked beneficial effect on the growth and healthiness of the trees. *Nilgiris*—Reproduction by seed was poor as usual *Kollegal*—*Hardwickia binata* seedlings, from last year's seed crop, are plentiful in Arepalaiyam, Chickailur and Madeswaranmalai. *Anogeissus latifolia* reproduced well everywhere. *Dendrocalamus strictus* seeded over most of the western

portion of the district. *North Coimbatore*—Coppice reproduction in young coupes closed to grazing was good. *Central Coimbatore*—Reproduction from seed was poor, except in the coupes recently felled and closed to grazing and the Attapadi valley. *Hardwickia binata* is getting on well in Singara tope, Kotagiri and Sundapatti working circles. It was a good seed year for all the important species. Coppice reproduction was satisfactory, though naturally comparatively poor in the east of the district. *South Coimbatore*—It was a good seed year for all the important species except *Xylia dolabriformis*. Coppice reproduction was satisfactory.

(*b*) *Artificial Reproduction.*

21. *Regular plantations.*—In *South Malabar* 51 acres of 1912 plantation were planted with teak spaced 8′ × 8′, with a few *Terminalia tomentosa*, *Lagerstrœmia flos-Reginæ* and *Dalbergia latifolia* interspersed in swampy ground. This completes the extension of the plantations. In 1912 plantation 6,711 teak and in 1911 plantation 36,826 teak and 750 *Terminalia tomentosa* casualties were replaced. In plantation 1908 the area planted 12′ × 5′ contains 130 healthy plants, and the area in which seed was dibbled contains 90 healthy plants. In the Beypore cocoanut plantation 5·62 acres were planted, and the plants in several plots were manured with a special fertilizer. The results of last year's manuring are not reported. In *the Nilgiris*—the experimental plantations of nine varieties of timber-yielding *Eucalyptus* at three different elevations were maintained, blanks filled and casualties replaced. In Snowdon 1,515 blanks were filled and 4,862 casualties replaced; in Aramby the numbers were 13,097 and 2,261, and in Keti 15,962 and nil; the plantations are now fully stocked. In Snowdon and Aramby *Eucalyptus punctata*, *Eucalyptus propinqua* and *Eucalyptus paniculata* are the most promising, while at Keti the varieties doing best are *Eucalyptus acmenoides*, *Eucalyptus pilularis* and *Eucalyptus propingua*. In Jackal plantation *Cyprus* and *Hakea* transplants were put out in Fife's and Rock coverts; the *Hakea* was badly frostbitten and *Cyprus* suffered from drought. In *Central Coimbatore* 1,500 *Swietenia mahagoni* seedlings were planted out at Dhoni of which only 356 survive; seedlings to replace casualties have been raised. In coupe VI of Virumandampalayam reserve 19,737 palmyra seeds were dibbled; germination was good. In *South Coimbatore* 30 acres were partly cleared for addition to Kariaushola plantation, but the area was not planted up.

Taungya plantations.—In *South Canara* the area kumaried in Kasaragod range was reduced to 80 acres from 183 in the previous year; part of this area was sown with teak, *Terminalia tomentosa* and *Pterocarpus marsupium*; Rs. 51-8-9 has been sanctioned as payment to the Marathis for 10,310 seedlings, 3′ high, raised by them in kumaried areas. Efforts are being made to make the Kudubies cultivate the same area for two successive years. In *North Malabar* the ponam cultivators of Kanoth sowed mango, jack and teak seed in the areas cultivated; 25 per cent. of the seedlings were alive at the close of the year.

Cultural operations.—In *South Canara* seeds of the more valuable species were sown or dibbled by subordinates at the commencement of the monsoon with a certain amount of success. In *North Malabar* groups of teak were planted in suitable patches in the reserves of Chedleth range, 10,000 seedlings being put out; results cannot be judged yet; teak seed was also sown among the ashes of burnt loppings in coupes XVI, XVII of Begur, but the results were not very successful. In Kanoth only 1,500 out of 14,000 teak seedlings planted in open spaces in the fuel coupe are alive. In *South Malabar* 35 acres of third-class plantation were weeded and casualties were replaced; over 27,500 plants were put out in some of the plantations, but many of them either died or were destroyed by deer. These efforts at restocking third-class areas have now been put a stop to, as the results do not justify the expense. In *Kollegal* 1,750 sandal seeds were dibbled into pits and along fences round Cowdalli, but no result from the previous year's operation is yet visible; 500 lbs. of *Acacia arabica* seed and 180 lbs. of *Cœsalpinia sepiaria* were sown in Dodda Induvadi blocks. Three hundred trenches were dug along the slopes of Gundal coupes II and III; the result of sowing in these trenches is satisfactory; three sacks of sandalwood seed were dibbled in under bushes over 100 acres in the Guligai reserve; the *Shorea Talura* nurseries at Gundal and Bylore were maintained, and the plants will be put out next year. In *North Coimbatore* 3,000 teak seedlings

were put out in October 1912 in coupe VI Kavalur after clear felling bamboos; on 2nd June 1913 650 were found alive; others may revive later in the year. Seven hundred and twenty-five teak seedlings were put out in coupe V Ennamangalam and died down during the hot weather. At Geddesal 3,837 rosewood, 1,600 *Pterocarpus marsupium* and 563 *terminalia tomentosa* seedlings were planted out in August 1912; at the close of the year 1,720, 465 and 190, respectively, survived; casualties were largely due to spotted deer and hares; preparation for further planting was made; casualties in the previous experimental plantations appear to have ceased and the plants have every chance of establishing themselves. At Onnaitittu 82 planted and 90 dibbled *Pterocarpus marsupium* survive. Six bags of seed were dibbled in coupe IX Senkaradu and coupe VIII Kanakampalayam, but failed as the dibbling was carried out too late. During May 32 bags of seed were dibbled in a burnt area, and in November, 1,942 seedlings were counted; sandalwood seeds were dibbled in pits in Kadhatti coupe, and sandal and other seeds were sown broadcast in ploughed land in the minor enclosures acquired in Palamalai reserve. In *Central Coimbatore*, over 80,000 running feet of trenches were dug in coupe VI Arachalur, coupe VI Villikaradu and coupe VI Chennimalai, and seeds of *Albizzia lebbek*, *Acacia planifrons*, *Tamarindus indica*, *Melia azadirachta* and *Chloroxylon swietenia* were sown in October; in June 1913 about one plant to every six feet of trench survived. Seeds of the above species were sown in block III Kanjikoil in areas cleared of pricklypear; the hot weather killed most of the seedlings. In coupe VI Villikaradu 3,000 seedlings were raised in pot tiles to be planted out in October 1913. Various seeds were dibbled in coupes VII Odanthorai, VIII Modur, III Kotagiri, I Singaratope and from 10 to 20 per cent. of the seedlings survive; the total expenditure on these coupes was only Rs. 10-2-0. In coupe VII Modur 5,000 basketted plants were put out at a cost of Rs. 35-8-0; 50 per cent. survive. The Scot plantations in Odanthorai, Garudachalam plantation and Modur were visited by elephants who ruined most of the plants.

(c) Operations for improvement of the growing stock.

22. In *South Canara*, light improvement fellings were carried out over 3,535 acres at a cost of Rs. 1,076, and creepers were cut over 1,735 acres at a cost of Rupees 172, and over 1,500 acres by the establishment. The improvement fellings have promoted the advance growth of *Hopaa parviflora* and wild jack. In *North Malabar* lantana was uprooted in three of the Begur teak plantations, and seedlings of good species were cleared by "grass knifing" in parts of Begur and Chedleth ranges. The 1892 and 1894-95 teak plantations were thinned at a cost of Rs. 172. In *South Malabar*, thinnings were carried out over 1,195 acres of teak plantation at a cost of Rs. 1,415. Mahogany was freed of teak in plantations 1902, 1904, 1905 and patches of pure mahogany were thinned. Wild elephants did much damage in young plantations in February and March with the result that 3,110 saplings had to be cut back in plantations 1898, 1910 and 1911. The bamboo seedling crop was rooted out over 94½ acres in plantations 1872, 1873 at a cost of Rs. 241, with satisfactory results. Parasites were removed from 1,072 acres of plantation (Rs 570) and creepers were cut over 498 acres of young plantation (Rs. 220). Creepers were also cut by the establishment over 350 acres in Amarampalam natural forests and 31½ acres in Panakadam reserve. Weeding was carried out over 568 acres of young plantation (Rs. 1,772) and pruning over 410 acres (Rs. 222). The cost of maintenance of young plantations was Rs. 1·20, against Rs. 1·21 in the preceding year. In *the Nilgiris* improvement fellings were carried out over 360 acres of Mudumalai forest at a cost of Rs. 2,971, the outturn was about 30,000 cubic feet of small teak, *Pterocarpus marsupium* and rosewood. Five acres of Benne teak plantations were thinned, 1,550 poles being removed. In *Kollegal* sandal seedlings and trees were freed of creepers and shade over 2,800 acres in Madeswaranmalai working circle; the felled coupes in Hanur adjoining the main road were wire fenced, and 56,065 dead and dying bamboos were removed from the Gundal and Arepalaiyam working circles. In *North Coimbatore* creepers suppressing sandal were cut in 4 coupes, and 48 acres in 2 fuel coupes were cleared of prickly-pear; the former operation cost Rs. 55, the latter Rs. 297. Nearly 8,000 spiked sandal trees were marked in Hassanur working circle for uprootal. In *Central Coimbatore* creepers were cut in all fuel coupes prior to felling and in seven young coupes where they were choking the coppice growth and

seedlings. Creepers were also cut over 117 acres in Chenat Nair reserve. The removal of bamboos from Sholakarai reserve was completed, but Walayar has not yet been fully cleared of the old dead bamboos; the improvement in growth in Sholakarai is very marked. Prickly-pear was removed and burnt over 500 acres in various working circles at a cost of Rs. 2,292, and the previously cleared areas were to a certain extent kept clear by the protective staff. In *South Coimbatore* the canopy was opened in 49 acres of the Tekadi forests to encourage the growth of teak, and in coupe IV Punachi improvement fellings were carried out and the soil round 209 trees was cleared and turned to encourage an advance growth of seedlings. Weeding was also carried out in coupes II and III Punachi.

(*d*) *Experiments.*

(i) *On species.*

23. *Swietenia Mahagoni* plants are doing well in *South Canara*, *North* and *South Malabar* but some have been damaged by deer in the last named district; 30 plants at Mudumalai (*Nilgiris*), 24 trees ranging from 10 inches to 42 inches girth at Vellapathi (*Central Coimbatore*) and 69 trees from 6 inches to 26 inches girth at Sholakarai (*Central Coimbatore*) are doing well.

Swietenia macrophylla.—The Chathamborai tree now forty years old measures 104 inches in girth and 105 feet in height; the species is established and natural reproduction is taking place; three pounds of seed were collected and 1,360 seedlings raised during the year.

Manihot Glaziovii in *South Malabar* was as usual much damaged by pigs.

Hevea braziliensis is doing well in *South Malabar*, 7 trees were tapped and yielded 15 lbs. rubber. There appear to be two varieties of this *Hevea*, one with a smooth grey bark which yield little or no rubber, the other with a rough brown bark which yields plentifully.

Landolphia Florida.—Eighteen creepers survive in *South Malabar*.

Kicksia Africana.—Twelve plants survive in *South Malabar*.

Cedrela odorata (West Indies) is doing well in *South Malabar and Coimbatore*; the largest tree in the Coimbatore museum garden is now seven years old and 30½ inches in girth.

Pinus insignis—Twenty plants at Cairn Hill (*Nilgiris*) are healthy and up to 13 feet high.

Schizolobium excelsum seeds from the Palnis were sown at Mount Stuart (*South Coimbatore*) and three seedlings out of twelve survive.

Tectona grandis.—In *South Coimbatore*, a light ground fire was run over an acre of coupe III Punachi in order to test the effect on germination of teak seed.

Bamboos.—The various exotic bamboos in *South Malabar* continue to flourish; in the *Nilgiris* the square Japanese bamboo in Gamble's nursery, Cairn Hill, is rapidly spreading; the *Thyrsostachys Copelandii* imported last year died. In *North Coimbatore* the results of felling one acre of bamboos every month for a year were negative, growth being almost equally good on all the twelve acres cleared. In *South Coimbatore* an experiment in clearing bamboos in order to favour regeneration of timber trees was commenced; no definite results can be expected for another year or two.

(ii) *On other points.*

24. In *South Malabar* the experiment to test the upward growth of teak stems and bark was continued; no tree showed a difference of more than ·66 inch since the original measurements made three years ago. A ground fire was run through eight acres of Nellikutha plantation to test the effect on caterpillar pests and locusts; several thousand immature locusts were destroyed; the effect on the caterpillar pests has not been reported. Two acres of swampy land from which young planted teak had died out were clean weeded and replanted, to see if clean weeding will affect the swampiness of the ground; no results can be expected yet. Teak borer larvæ were

sent for identification to Dehra Dun where they are being bred. In *Central Coimbatore* the experiment to determine the effect of fire on grass growth was resumed; the section allotted for hay making was cut and yielded 1,185 lbs. hay against 698 lbs. in 1909.

5. Exploitation.

(*a*) System of Management.

25. The various sylvicultural systems in force are classified in the following table:—

Sylvicultural system.	Area in square miles.	Percentage of total area under each sylvicultural system.
Method of clear fellings by compartments	10·32	·73
Uniform method	...	...
Group method	...	...
Selection method	217·48	15·45
Simple coppice	4·80	·34
Coppice with standards	144·62	10·27
Method of improvement fellings	262·60	18·65
Areas not worked or subjected to any definite system of working	768·18	54·56
Total ...	1,408	100

Note.—The areas given in this statement cannot be relied on, as much of the information received from districts was faulty, and received so late that there was not time to obtain revised figures.

(*i*) *Major Forest Produce.*

(1) *Clear or Regeneration Fellings.*

26. In *South Canara* 10 acres of Tannirbhavi plantation, and Kuthiar reserved forest were clear felled with a view to disafforestation.

(2) *Selection Fellings.*

27. *South Canara.*—Selection fellings were carried out in 17 acres of coupe VIII of Mudibare and mature trees in Someshwar coupe IX were sold standing. *North Malabar.*—Five hundred and ninety acres in coupe XVII of Begur and 500 acres in coupe III of Chedleth were felled. *The Nilgiris.*—Sandalwood trees which yielded 276 maunds were felled in Segur range. *Kollegal.*—Spiked sandal trees were extracted from coupe II and a portion of coupe III of Madeswaranmalai and from coupes II and IX of Bailur; in all 8,719 trees were extracted. A small area in Hanur reserved forest was felled for supply of small timber and agricultural implements. *North Coimbatore.*—Sandalwood trees were felled over an area of 6,495 acres and bamboos extracted from eight coupes of 14,689 acres. *South Coimbatore.* A portion of coupe XIX of Tekadi leased forest, coupe I of Ulandi and coupe IV of Punachi working circles were felled.

(3) *and* (4) *Improvement and Coppice Fellings.*

28. In *South Canara*, twelve coupes covering about 600 acres in Coondapoor and Sankaranarayana ranges and 25 acres of a coupe in Kasaragod range were coppiced. Eighty acres in Udipi range were felled to supply fuel to 203 sandalwood oil stills. In *North Malabar*, a coupe of 25 acres in Kanoth reserved forest was felled for supply of fuel to Tellicherry town. In *South Malabar*, thinnings in teak plantations were carried out and 30,838 trees were removed; 109 dead, windblown and uprooted trees were also removed. In *the Nilgiris*, improvement felling was carried out over 360 acres in Mudumalai working circle; the yield was 31,153 cubic feet of timber, mainly teak. Fifty-seven acres of plantations in Coonoor and Ootacamund ranges were coppiced for supply of firewood and charcoal to the public. In *Kollegal*, improvement fellings were carried out in coupes I to IV of Madeswaranmalai sandal working circle for freeing sandal trees. Four fuel coupes covering 275 acres were coppiced

In *North Coimbatore*, twelve fuel coupes covering 942 acres and 226 acres for supply of drag poles and agricultural implements were coppiced. In *Central Coimbatore*, thirty fuel coupes covering an area of 1,471 acres were coppiced. In *South Coimbatore*, improvement felling was made over 90 acres in Punachi coupe IV and 328 acres were coppiced.

(5) *Unregulated Fellings.*

29. In *South Canara*, cinnamon leaves and firewood required for working 50 stills were removed from unreserved lands. Timber and bamboos were removed from unreserved lands on payment of seigniorage. In *North Malabar*, bamboos, fibre, canes and reeds were removed on permits except from Kottiyur reserved forest. In *South Malabar*, bamboos were extracted on permits for rafting and floating timber. In *the Nilgiris*, the requirements of the resident ryots for small timber, fuel, bamboos, etc., was met by issue of permits. In *Kollegal*, removal of bamboos on permits was allowed in places where there are no depots. In *North Coimbatore*, 10,301 cubic feet of timber and 10,191 cubic feet of fuel were removed on permits from unreserved lands. In *South Coimbatore*, bamboos were removed by permit-holders.

(ii) *Minor Forest Produce.*

(1) *Miscellaneous Produce.*

30. Minor produce was generally leased out with the following exceptions:—*By departmental agency*—Manufacture of catechu in *South Canara*, collection of miscellaneous produce in Mudumalai and Udumalpet ranges in *the Nilgiris* and *South Coimbatore*, respectively. Some items such as gallnuts, shekoy and deer horns in *Kollegal* and all produce except tamarind, avaram bark and date leaves in *North Coimbatore*. *By removal on permits*—Rough and chiselled stones, road metal, etc., in *the Nilgiris*, *Kollegal*, *Central* and *South Coimbatore*.

(2) *Extraction of Fodder.*

31. Fodder grass was removed on permits in *South Malabar* and *Coimbatore*; the right of collecting such grass in parts of *Central Coimbatore* was leased out. The free removal of thatching grass from reserved forests in *South Canara* and by the Todas of the plateau and the Chettis of Mudumalai in *the Nilgiris* was continued. The concession of free removal of grass is not required in *Malabar* and was not allowed in *Coimbatore* where there is no necessity for it.

(3) *Hay-making.*

32. About twenty tons of hay were collected in *South Canara* for feeding Government bullocks and buffaloes. The preparation of hay in *Central Coimbatore* was left to private agency.

(4) *Grazing.*

33. Grazing was, as usual, regulated by issue of permits. The forests of *South Malabar* are closed to grazing, and goat-browsing is entirely prohibited. A conference was held with the local ryots regarding the Udumalpet grazing scheme in *South Coimbatore* and the result of it was that they had no real grievance and that the restrictions imposed by the scheme are beneficial to them.

The number of animals licensed to grazing on payment was 386,885 against 373,913 in the previous year.

(*b*) Agency of Exploitation.

(i) *Departmental Agency.*

34. *Major produce—South Canara.*—Felling and transport of timber from one, and fuel from seven coupes, extraction of dead trees from a portion of Parappa reserved forest and of bamboos from the forests of Uppinangadi range, also creeper-cutting and light improvement fellings were carried out. *North Malabar*—39,631 cubic feet of timber were felled in Begur coupe XVII; 20,000 bamboos extracted and 9,600 cubic feet of fuel felled from Kanoth reserved forest for supply to Tellicherry town. *South Malabar*—Thinning of teak plantations, dragging, storing and

classifying saplings and floating some of them to Beypore and felling and transport of bamboos were carried out as usual. *The Nilgiris*—Timber and sandalwood were collected in Mudumalai and Segur ranges, respectively. *Kollegal* and *North Coimbatore*—Small timber and fuel were felled and bamboos and sandalwood extracted. *Central Coimbatore*—Fuel was felled over an area of 204 acres and charcoal manufactured. *South Coimbatore*—Felling and transport of timber from the Anamalais and the leased forests was carried out.

Minor produce.—The details are given in paragraph 30.

35. *Disposal of produce at the edge of the forests.*—In *South Canara*, fuel was sold on a small scale at the edge of Muliar reserved forest and in some of the coupes; also the fuel and timber poles obtained from improvement felling in Pilarkan and the dead trees extracted from Parappa reserved forest. In *North Malabar*, there is no demand for Government produce owing to the existence of extensive private forests. In *South Malabar*, teak logs and saplings in Nellikutha and old Amarampalam plantations were sold on the river bank. The attempts made in Kollegal to sell fuel at one forest edge depot and in small coupes opened at the edge of forests proved unsuccessful as the requirements of the thinly populated villages which are scattered is met from large areas of unreserved lands. Fuel felled departmentally in this division and in *North* and *Central Coimbatore* was sold in the forests. The contractors in the lastnamed district sold timber, fuel and bamboos in the forests to purchasers.

(ii) *By Purchasers.*

36. Seven fuel and one timber coupes in *South Canara*, one timber coupe in *North Malabar*, one timber, three fuel and six bamboo coupes in *North Coimbatore*, all except a few fuel coupes in *Central Coimbatore* and all except one fuel coupe and three bamboo coupes in *South Coimbatore* were sold standing. The public were permitted to remove bamboos on payment of Rs. 2 per hundred from coupes in one of the ranges in *South Canara*. The felling of 297 windblown and uprooted trees in Karimpoya plantation in *South Malabar* was given on contract.

(iii) *and* (iv) *By right-holders and under privileges and free-grants.*

37. The following abstract shows the quantity and estimated value of produce removed by right-holders and free-grantees :—

—	Timber.		Fuel.		Bamboos.		Grass and grazing.	Other minor produce.	Total.
	Cubic feet.	Value.	Cubic feet.	Value.	Number.	Value.	Value.	Value.	Value.
		Rs.		Rs.		Rs.	Rs.	Rs.	Rs.
Right-holders	33,386	13,206	28	2	1,392	4	702	19	13,933
Free-grantees	6,062	920	975	73	9,045	91	..	417	1,501
Total .	39,448	14,126	1,003	75	10,437	95	702	436	15,434

The estimated value of produce and grazing enjoyed by right-holders and removed by free-grantees was Rs. 13,933 and Rs. 1,501 respectively, against Rs. 21,251 and Rs. 2,396 in the previous year. The large quantity of fuel removed by Badagas in *the Nilgiris* on payment of a nominal annual fee of one rupee per house cannot be estimated and is therefore not included in the above abstract. The free grants were made chiefly for rebuilding houses destroyed by fire and grants amounting to Rs. 753 were made in *South Canara* for construction of, and repairs to, churches and temples.

(*c*) OUTTURN AND SOURCES OF FOREST PRODUCE.

38. The following abstract compares the total outturn of major and other produce collected by different agencies from all classes of forests during 1911–12 and 1912–13 :—

Agency of exploitation.	Timber including sandalwood in cubic feet.		Fuel in cubic feet.		Bamboos in number.		Minor produce including grass and grazing in rupees.	
	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.
1	2	3	4	5	6	7	8	9
By Government Agency..	281,316	286,927	2,175,521	2,071,673	122,914	2,06,909	24,496	25,647
By purchasers	259,715	300,788	1,284,676	2,068,520	4,317,539	4,818,838	1,29,111	86,225
By right-holders	51,747	33,386	33	28	1,371	1,292	739	721
By free-grantees	11,053	6,062	636	975	13,056	9,045	98	417
Total ..	6,03,831	6,27,163	3,460,866	4,141,196	4,454,880	5,036,184	1,54,444	1,13,010

Departmental Agency—Major produce.—The increase under " timber " was chiefly in *North Malabar* due to the felling of Begur coupe and in *the Nilgiris* to the large quantity of timber felled in Mudumalai working circle. The decrease under " fuel" was chiefly due to a small quantity of fuel being felled in *the Nilgiris* and *Kollegal* owing to the previous year's stock remaining undisposed of and to the extension of the contract system in *Central* and *South Coimbatore*. The increase under " bamboos " was mainly in *South Malabar* due to a large number of bamboos being felled for floating teak logs and saplings and in *Kollegal* to heavy extraction from flowered clumps. *Minor produce.*—The total outturn of " minor produce " was 146 tons against 207 tons in the previons year, the decrease being chiefly in *Central Coimbatore* due to hay-making operation being left to private agency and partly in *North Coimbatore* owing to poor collection of gallnuts and other miscellaneous produce. *By purchasers.*—No useful comparison of the outturn by this agency can be made owing partly to the unsatisfactory method of converting the sale amounts into yield in proportion to seigniorage rates and partly to the unreliable accounts rendered by contractors. There was a general increase under " major produce " ; the increase under " timber " was due to an increase in the value of trees removed from darkhast lands mainly in *Central Coimbatore* and to the outturn from unreserved lands being brought to account in *Kollegal* while it was omitted last year, under " fuel " partly to the reason given for the increase in *Central* and *South Coimbatore* under " departmental agency " and partly to increased areas sold standing in the former district and in *South Canara* and under " bamboos " to a general increased demand and to the coupes sold in *North Coimbatore* being richer than those of the preceding year.

CHAPTER III.—FINANCIAL RESULTS.

39. The following abstract compares the financial position of the year under report with that of the previous year and the average of the preceding quinquennium :—

—	1912-1913.	1911-1912.	Average of the preceding quinquennium.
	Rs.	Rs.	Rs
Revenue	9,07,220	*7,89,763	6,99,814
Expenditure—			
Refunds	2,925	2,405	2,741
A. Conservancy and works	4,39,315	4,71,572	4,38,980
B. Establishment	3,60,646	3,57,718	2,87,457
Total expenditure ..	8,02,886	8,31,695	7,29,178
Net ..	+ 1,04,334	— 41,932	— 29,364

* Excludes Rs. 3,588 and Rs. 240 relating to the Bombay Presidency and Madura, respectively.

The gross receipts are a record for the Circle. The chief reasons for the increase are :—Higher rates obtained for timber and sandalwood, sale of elephants and fresh leases of lands on the Anamalais for cultivation. Compared with last year, the revenue increased by Rs. 1,17,457 and the expenditure decreased by Rs. 28,809 ;

the proportion of net to gross revenue rose from — 5·3 to + 11·5 per cent. Sixty-three per cent. of the receipts was from major produce, 9 per cent. from grass and grazing, 8 per cent. from minor produce and 20 per cent. from miscellaneous sources. Of the expenditure 33 per cent. was spent on the up-keep and improvement of the forests, 38 per cent. on exploitation and 29 per cent. on miscellaneous items. The estimated value of the produce at sale depots at the close of the year was Rs. 2,12,882, against Rs. 1,58,685 at its commencement. The revenue outstanding was Rs. 49,548, of which Rs. 21,001 fell due within the year, chiefly in *North Malabar* and the *Nilgiris*.

The chief variations between the actuals of this year and those of the previous year are explained below:—

RECEIPTS.

(i) *By Departmental Agency.*

Timber + 37,639. Derived mainly by sale of a larger number of plantation teak logs and poles in *South Malabar* and by better prices obtained for and more extensive sales of timber in *South Coimbatore*.

Fuel — 14,681. Due mainly to the introduction of the contract system in *Central* and *South Coimbatore*. The deficit was partly counterbalanced by an increase in *South Canara* owing to the expansion of demand for fuel for the Bombay market and in *North Coimbatore* to increased area worked and to better prices realized.

Bamboos + 2,152. Due to sale at better prices of a larger number of bamboos used for rafting and floating in *South Malabar* and the extraction of bamboos from dying clumps and sale of bamboo thorns in *Kollegal*.

Sandalwood + 49,483. Due partly to sale of previous year's stock in the *Nilgiris* and *North Coimbatore* and partly to better prices realized.

Minor produce + 1,855. Due chiefly to better prices obtained for catechu in *South Canara* and some of the miscellaneous produce in *Kollegal* and *South Coimbatore*.

(ii) *By Purchasers.*

Timber — 7,618. Due mainly to non-sale of Begur timber coupe in *North Malabar* for want of bidders.

Bamboos — 2,614. Due chiefly to non-sale of two coupes in *North Coimbatore*.

Grazing + 5,066. Due to a large number of cattle being licensed for a cattle fair in *South Canara*, closer supervision in the *Nilgiris*, improved protection in *Kollegal* and sale of fodder grass in *North* and *South Coimbatore*.

Minor produce — 6,545. Due principally to exemption of seigniorage on road metal collected by the contractors of the Local Fund Department, to short removal of manure leaves owing to enhancement of seigniorage in *South Canara* and to lower prices realised in *North Coimbatore* for avaram bark and tamarind.

(iii) *Miscellaneous (including confiscated drift and waifwood.)*

Revenue + 53,386. Realized chiefly by sale of nineteen elephants and by collection of arrear rents and value of additional lands leased out on the Anamalais.

EXPENDITURE.

A.— Conservancy and works.

The expenditure was less than that of the previous year by Rs. 32,257. The decrease was mainly under I (*b*) due to extension of contract working in *Central* and *South Coimbatore*, VI (*b*) to sale of elephants and casualties among bullocks which reduced the cost of maintenance and establishment and VII (*a*) to the heavy expenditure incurred in the previous year on improvement to plantation roads in the *Nilgiris*.

B.—Establishments.

The promotion of rangers, increased rate of grain compensation allowance sanctioned for certain districts, advertisement charges for sales of timber and elephants and debit of the cost of uniform and warm clothing chiefly contributed to the increase of Rs. 4,568.

CHAPTER IV.—ADMINISTRATION.

40. Mr. F. A. Lodge held charge of the Circle throughout the year.

District and range charges.—There were no changes. The proposal to divide the *Kollegal* forest division into four range charges was approved but not brought into force pending receipt of the sanction of Government to the creation of the two new ranges.

Establishment.—The paucity of establishment is keenly felt. It has not been possible to keep the ranges fully manned and progress on sanctioned works has consequently not been satisfactory. Several works had to be abandoned for want of establishment.

41. *Work of superior officers.*—The following are extracts of the remarks made by the Collectors: *South Canara—By Mr. Couchman*—"Mr. Barry takes special interest in the scientific side of forestry. He did good work in improvement fellings . . . M.R.Ry. V. Raman Menon . . . . is a very active officer keenly interested in his work. The Extra Assistant Conservator Mr. K. Syed Edulla Sahib, from what little I saw of his work, seemed hardly up to his position and to be wanting in initiative and resource". *Malabar—By Mr. Innes—North*—"Mr. G. F. F Foulkes . . . . His work was marked by his usual enthusiasm and keenness." *South*—"I have nothing but praise for the work of the Forest Officers who held charge of the district during the year." Messrs. Wimbush, Wilson and Bourne held charge of the district. *The Nilgiris—By Mr. Young*—"Was as usual excellent." This remark relates to Mr. Cox. "Mr. Gaudoin's work was satisfactory as Range Officer. For responsible administrative posts he requires a wider outlook and more initiative and drive. Mr. Habibulla Sahib . . . . is doing good work." *Coimbatore—By Mr. Hemingway—Kollegal.* "Mr. Littlewood has worked actively and most industriously throughout the year." *North*—"Mr. Richmond . . . His work was as usual characterised by energy, industry and efficiency." *Central*—"M.R.Ry. Panchapakesa Ayyar worked hard during the year under report . . . ." *South* "Mr. Fischer worked hard and efficiently throughout the year". Possibly the most valuable piece of work done during the year was the preparation of the Nilgiri plantations working plan by Mr. Cox.

42. *Executive Establishment.*—The work of the Rangers is generally well reported on, the following being specially commended for good work:— P. Venkataramanan, Saldanha, Lazrado, E. B. Ramachandra Rao, K. C. Kannan, A. Swamikutti and Antony Culas; the first mentioned has been promoted to Extra Assistant Conservator. Three Rangers were reduced—one temporarily and the other two permanently; one acting Ranger was suspended and one Ranger was dismissed. The work of Deputy Rangers was not satisfactory, owing partly to want of training. Two resigned, three were suspended, the probation of one was terminated, two were dismissed, and the deputation of one to the Madras Forest College was cancelled for bad work.

43. *Protective Establishment.*—The Foresters are reported to be working well in *North Malabar*. The conduct of Foresters in the *Nilgiris* was on the whole satisfactory and that of guards fairly satisfactory. In other districts the conduct of the establishment with a few exceptions is still unsatisfactory. The punishments reported are: dismissals 30, removals from service 65, suspensions 61, reductions 15 and prosecutions 7; the Forester who misappropriated fuel during the last year in *South Canara* has made good the value of the whole quantity misappropriated.

44. *Ministerial Establishment.*—The clerical staff is reported to have worked satisfactorily in *South Canara*, well in *Malabar* and *the Nilgiris*, and moderately well in *North Coimbatore*. The Head Clerks of the *Kollegal*, *Central* and *South Coimbatore* offices were replaced by better men and the tone of these offices is reported to have improved. The head clerk of the *Kollegal* office was reduced for bad conduct, one clerk in the same office was suspended and one in *South Coimbatore* was temporarily reduced. One range clerk in *Kollegal* and one in *Central Coimbatore* were suspended, the services of one range clerk in *North Malabar* and one in *South Coimbatore* were dispensed with, one range clerk in *Kollegal* was removed for inefficiency and another was dismissed for deserting. The work of the circle office was satisfactory.

45. *Health of the Establishment and Casualties.*—The health of the establishment was fair in *North Coimbatore*, good on the plateau of the *Nilgiris* and bad elsewhere.

Deaths.—One in each of the *Nilgiris*, *Kollegal* and *Central Coimbatore*, two in *South Coimbatore*, three in *South Canara*, four in each division of *Malabar*. It has been an exceptionally unhealthy year, and a large number of subordinates have had to be granted leave on medical certificate.

46. *Relations between Revenue and Forest officers.*—The relations continued to be cordial. Range Officers attended the jamabandi in *South Canara and Central Coimbatore*. Such attendance was not required in *Malabar* and was not carried out in the other divisions of *Coimbatore* owing to non-communication of the jamabandi officers' programmes. In the *Nilgiris*, the Forest and Revenue Officers were in constant touch with each other.

47. *Service Books.*—These are reported to have been maintained in all districts and verified to the close of the financial year except in the *Nilgiris* where they were verified to the close of the calendar year.

48. *Tours of the Forest Member.*—The Hon'ble Mr. W. O. Horne visited *South Canara* and conferred with the Collector and District Forest Officer regarding the departmental supply of fuel to the Mangalore town, he inspected also the Kanoth range in *North Malabar*.

49. *Conservator's inspection.*—All the District Forest offices were inspected and found generally in good order; the forests of *South Malabar*, *the Nilgiris* and *South Coimbatore* and part of the forests of *Kollegal* and *North Coimbatore* were also inspected. The total number of days spent in camp was 192.

50. *Touring of District Forest Officers.*—All the officers except the District Forest Officer, *the Nilgiris*, spent in camp more than the minimum period of touring prescribed; deficiency of the excepted officer amounted to eleven days and is ascribed partly to his having been engaged in the preparation of a working plan for the plantations and partly to his numerous inspections within 5 miles of head-quarters with the Vernacular Training School. Considering the number of plantations being worked within the 5 mile radius of Ootacamund, it is advisable not to insist on the District Forest Officer spending six months outside that radius.

51. *Inspection of Range offices.*—All sale depots and range offices, except one in *South Coimbatore* were inspected. The results of the inspections were generally satisfactory.

52. *Audit of accounts of District Forest offices.*—The auditors of the Local Fund Audit establishment audited the accounts of all the offices except the *Nilgiris* which was inspected by the Assistant Accountant-General. The results are reported to be satisfactory. The accounts of the *Nilgiris* were not audited in detail during 1911–12 also.

53. *The Imperial Forest College, Dehra Dun.*—Two Rangers returned from the College with higher standard certificates and two after undergoing the third year's course. Two nominees to the Provincial Service were deputed for training.

54. *The Madras Forest College.*—Two Rangers and two Deputy Rangers were deputed for training. One of the Rangers had to be withdrawn owing to a stroke of paralysis. The services of one Deputy Ranger were dispensed with as he was removed from the College for unsatisfactory work and conduct.

55. *Vernacular Training School.*—The year's session was held in the *Nilgiris*. The health of the instructors and students was not good. Mr. Cox's remarks about the instructors are: "The two instructors have had a hard time and did their work capitally. Mr. Srinivasa Ayyangar has at his service a compound of firmness and tact which makes him an excellent instructor, capable of overcoming the many difficulties which the management of school entailed without constant reference to his superiors, and he was ably assisted by Ranger Kunhi Royan. I am sorry to say that both the instructors are ill and have had to take leave." The course was completed after the close of the year under report. Of the 27 students remaining at the close of the session, five secured first-class and the rest second-class certificates. The result of the previous session was that out of 31 students, 7 passed in the first-class and 23 in the second-class; one who was absent for more than two months was not eligible for any certificate.

CHAPTER V.—GENERAL.

56. *Realization of revenue from the usufruct of toddy yielding trees on Government wastes and poramboke lands.*—The revenue realized in *South Canara* was Rs. 2,203 against Rs. 2,625 in the previous year. Very small amounts were realized in *South Malabar*, *Kollegal* and *North Coimbatore*. The palmyras in the forests of *Central Coimbatore* were as usual leased out; the amount of the year's lease is not reported.

57. *Measures adopted to encourage the growth of manure leaf-yielding trees and shrubs.*—No steps were taken as in some districts the demand was met from private forests and unreserved and patta lands and in others such measures are not required.

58. *Supply of forest produce to meet the wants of the people—South Canara.*—The concession of free removal of thatching grass used also at times as fodder, retail sales of fuel by contractors in certain localities, and free removal of grass and leaves from a portion of the Baindur reserved forest were continued. *Malabar*—local demands are met as usual from private forests and unreserved lands. The felling and removal of bamboos, fibre, etc., were allowed on permits in *North Malabar*. The *Nilgiris*-permits were as usual issued for small timber, fuel, bamboos and other produce. The Badagas continued to obtain their annual requirement of fuel on payment of one rupee per house. The public of Coonoor and Ootacamund obtained their supply of fuel and charcoal mostly by direct delivery from the plantations. *Coimbatore*—small timber and agricultural implements were retailed in *Kollegal* through the agency of monigars and permit-issuing officers and in *North Coimbatore* from forest depots; periodical auctions were also held in the latter division. In *Central Coimbatore* the public obtained timber, fuel and bamboos from contractors to whom most of the coupes of the year were sold standing. The coupes which fetched no offers were felled departmentlly and the fuel sold in the forests at fixed rates. The distribution and sale of forest produce in *South Coimbatore* was left to contractors. Brakepoles were prepared departmentally and sold to cartmen at the heads of ghats. Permits were issued to remove, by head loads, brushwood from coupes under working in *South Canara*, *Kollegal* and *North* and *Central Coimbatore*. The quantity removed during the year in the last two districts is reported to be 9,669 and 11,670 head loads respectively; as usual the removal of fodder and thatch grass in the last named district was regulated by the issue of permits at 3 pies per head load.

59. *Grant of Cowles for the formation of casuarina plantations in sandy areas.*—There were no applications for such grants.

Rules under the Forest Act.

60. (*a*) *Timber Transit Rules.*—The rules are reported to have worked satisfactorily in *North Malabar* and the four divisions of *Coimbatore*; the interest of Government in *South Canara* is not being sufficiently safeguarded so far as the rules relate to private lands; some modifications to the rules have been proposed. In *South Malabar* the registration of property marks was enforced under the rules.

(*b*) *Rules under Section 26 of the Forest Act.*—The rules are said to have worked satisfactorily and no abuse of the privileges was brought to notice. This is natural as there is no establishment to detect abuses. *Unreserved lands under the control of the Forest Department*—11·47 acres in *North Malabar* were retransferred to the Revenue Department leaving a balance of 477 acres. There were no changes in the other districts.

(*c*) *Other Rules.*—The sandalwood transit rules in *Kollegal* and *North Coimbatore* and the game rules and the rules for the protection of fish and the regulation of fishing in the *Nilgiris* are reported to have worked well.

61. *Hill tribes.*—In *North Malabar* 80 acres of unreserved lands under the control of the Forest Department were granted free to the local ryots for ponam cultivation on condition of their supplying labour and planting the area with teak seedlings. Kurumbers in the *Nilgiri—Wynaad* have been brought under better control, but the Irulars and Kurumbers on the slopes are still a source of danger to the forests during the fire season; they cannot be controlled efficiently until the executive staff is strengthened and the two plateau ranges are split up. The Sholagar settlements in

Kollegāl and *North Coimbatore* were continued on condition of their supplying labour and collecting miscellaneous produce ; one of the defaulting settlements in *North Coimbatore* was punished by the collection of assessment on the lands leased out and another was warned of the termination of its lease. In *Central Coimbatore* the Irulars in Bolampatti forest continued to have free leases covering 127 acres in consideration of their supplying labour ; 146 acres of land were leased out to the Irulars in the Attapady valley for the same purpose.

62. *Cultivation in reserved forests—South Canara.*—One of the tenant-at-will leases covering an area of four acres was terminated ; the area of such leases remaining at the close of the year was 21 acres with an annual rent of Rs. 24. *North Malabar* —An aggregate area of 724 acres was leased out for ponam and wet cultivation on an annual rent of Rs. 1,683. The lease of four acres on an annual rent of Rs. 10 in old Amarampalam for paddy cultivation in *South Malabar* and the grant of about 150 acres in the *Nilgiris* to the Irulars and Kurumbers free of rent for cultivation were renewed. The lease for rubber cultivation in *Kollegal* continued ; the rubber cultivation being a failure, coffee was raised on the land. *North Coimbatore*—186 acres were granted for cultivation on payment of rent. The Quilon Fibre Company had the lease of Arachalur reserved forest in *Central Coimbatore* free of rent for aloe cultivation up to 1st March 1912 and had to pay rent from that date as per agreement. As the Company failed to pay the rent due, the lease was cancelled and the forest resumed after the close of the year.

Live and Dead Stock.

63. (*a*) *Elephants.*—Twenty elephants were captured during the year and there were two births ; 19 were auctioned for Rs. 45,695, one small calf (new capture) escaped from the kraal and five died ; the number remaining at the close of the year was 117. Of the deaths, one was a calf born during the year, one a new capture which succumbed to the injuries caused by the fall, and the other three were captures of the last two years which had been ailing. All the elephants are reported to be in good condition. The mahouts who kept the elephants under their charge in good condition throughout the year were rewarded as usual.

(*b*) *Bullocks and Buffaloes.*—Eight bullocks were purchased during the year. The casualties of the year were seven deaths from old age, six destroyed being unfit for work and fifteen sold. There were 137 bullocks at the close of the year. The 49 buffaloes at the commencement of the year were increased by one purchase ; one died of old age and one was destroyed being unfit for work.

(*c*) *Veterinary establishment.*—Mr. F. X. Mascarenhas, Special Veterinary Inspector, was on leave for six months on account of illness. He and his *locum tenens* repeatedly inspected the live-stock in different localities and attended to their ailments. Mr. Mascarenhas continued to do excellent work. One Assistant Veterinary Inspector on Rs. 50 + 25 and an additional jemadar on Rs. 20 were sanctioned during the year and have been posted to the charge of the live stock in *South Coimbatore.*

(*d*) *Inventory of valuable stock.*—Stock registers are reported to have been maintained in all districts and verified at inspections.

64. *Rain gauges.*—The readings recorded during the year are given in Appendix F. . The readings in *South Canara* continued to be unreliable and the accuracy of those in *Central Coimbatore* is reported to have improved.

65. *The Gass Forest Museum and the Museum garden at Coimbatore.*—The Museum was as usual open to the public throughout the year and there were 7,044 visitors against 4,464 in the previous year. Twenty-five specimens were contributed during the year. Mr. C. E. C. Fischer made a further contribution of 102 identified specimens to the herbarium.

The Museum garden was maintained as usual and Rs. 107 were realized by sale of produce. Several seedlings and plants have been raised in the beds for planting in the Forest College site. The failure of monsoon has affected the garden.

66. *Suits.*—There were no suits of importance.

Coimbatore,
3rd October 1913.

F. A. Lodge,
Conservator of Forests, Western Circle.

ADMINISTRATION REPORT OF THE MADRAS FOREST COLLEGE, COIMBATORE, FROM 1ST JULY 1912 TO 30TH JUNE 1913.

CHAPTER I.

The office of Principal was held by Mr. F. C. L. Cowley-Brown, Deputy Conservator of Forests, throughout the year except during the period 11th March to 17th April 1913, when he was on privilege leave but directed the internal administration until 4th April 1913. The office of Principal was temporarily held by Mr. A. Wimbush, Deputy Conservator of Forests, from 4th April to 17th April 1913.

The posts of Instructors were held throughout the year by—

(1) M.R.Ry. V. Subrahmanya Ayyar Avargal, M.A., F.L.S., F.Z.S., Extra Deputy Conservator of Forests; and

(2) M.R.Ry. K. R. Venkataramana Ayyar, Extra Assistant Conservator of Forests.

Mr. C. Srinivasa Rao, B.A., Curator of the Gass Forest Museum, was appointed Lecturer in Botany from 1st July 1912 until 20th May 1913. From the latter date a separate Curator was appointed for the museum and Mr. Srinivasa Rao became third Instructor. Sub-Assistant Surgeon, Kannan Nayar, has carried out his duties of Medical officer since the beginning of May. Havildar Arogyaswami of the 2nd Queen Victoria's Own Sappers and Miners, was appointed college havildar, drill instructor, and camp superintendent with effect from 11th July 1912.

An Imperial Instructor, Mr. A. Wimbush, Deputy Conservator of Forests, was added to the College staff on the 23rd June 1913.

The Board of Visitors met at Coimbatore during the year (on the 27th and 28th June) and passed decisions on some thirty questions raised by the Principal. The Board also paid visits to the present college, the hostels, and the new college site. The college was visited by the Hon'ble Sir John Atkinson on 12th July 1912, and by Mr. Beadon Bryant, C.S.I., late Inspector-General of Forests, on 16th January 1913.

CHAPTER II.

A nominal roll of students as they originally entered the college is given in Appendix I to the report. Their educational qualifications are noted against each.

After removal from the college of five students for illness, incapacity, etc., and the death of one promising student, the first year's division at the close of June 1913 was composed of 25 students (all already in Government service). The first batch of students was entirely confined to the Madras Presidency.

The following table shows the different circles from which the students were recruited and their number:—

Circles.	Number of students at time of entry, 1st July 1912.	Number of students, 30th June 1913.
Northern	8	8
Central	11	9
Southern	8	6
Western	4	2
Total ...	31	25

Remarks.—One student was granted two months' privilege leave on medicial certificate from 12th June 1913 owing to ill-health and has since been withdrawn from the college.

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The proportion of European and Eurasian students to Indian students is shown in the table below :—

Circles.	Number of students on 1st July 1912.		Percentage of Europeans and Eurasians.	Number of students on 30th June 1913.		Percentage of Europeans and Eurasians.
	Europeans and Eurasians.	Indians.		Europeans and Eurasians.	Indians.	
Northern	1	7	..	1	7	
Central	2	9		1	8	
Southern	2	6		1	5	
Western	1	8		..	2	
Total ..	6	25	19	3	22	12

Chapter III.

The College course.—The college assembled on 1st July 1912 and remained at head-quarters until September 9th. During this period lectures were delivered on the following subjects :—

Sylviculture,
Physical Science (including physiography),
Geometrical drawing, survey and estimating,
Engineering,
Botany,

a short course of forest zoology was undertaken, a commencement in forest utilization was made, and a few lectures on sanitation were also given.

At least twice a week the students were drilled, and were instructed in tent-pitching, whistle signals, and fire drill by the havildar.

On Saturdays the students were taken to the new college site for practical instruction and demonstration in planting operations, *e.g.*, preparation of nurseries (including digging and watering), transplanting, and the formation and maintenance of the wind belt on the western edge of the new site. They were also shown the various building works in progress and were instructed in the strength of materials, brick-making, quality of mortar, etc. Certain of these occasions were also utilized for survey work.

The Gass Forest Museum was made full use of for demonstrations in botany, forest engineering, utilization, etc. The arboretum adjoining the museum was frequently visited for purposes of systematic botany.

From September 10th till December 20th the college was on tour at Mount Stuart (Anamalais) and at Nilambur and Nedungayam in South Malabar forest division, with a short intermediate halt at head-quarters while the Principal was on deputation at Dehra Dun. Besides general sylvicultural and botanical examination of the various types of forest met with (including coppice under standards at Sethumadai) the following special works were carried out at the request of the District Forest Officers :—

Mount Sturat.—Enumeration Surveys, planting a portion of Karianshola, record of levels and preparation of a trace of tramway, survey of site for permanent camp.

Nilambur and Nedungayam.—Enumeration and valuation surveys, markings for thinnings in two plantations : alignment, plotting, and construction of bridle ghaut, construction of an Irish bridge and approaches.

A site for the permanent camp at Nedungayam was surveyed and plotted by the students. Practice was given in rafting, in Elephant work, and at Mount Stuart in removing a captured elephant from a pit.

From Nedungayam a teak tree 192 feet high and 16 feet 8 inches in girth was visited and measured by Mr. Venkataramana Ayyar. This is not improbably the tallest teak tree in India. The timber depot at Feroke and the saw mills in Malabar were visited.

A Marathon race of some 7 miles was run off and won by student Ganapati in very creditable time.

From January 17th till March 8th the division was in camp at Bolampatti, Central Coimbatore division, at Mundanthorai in Tinnevelly division, and for a couple of days on the way back at Ayalur (Madura).

Before leaving head-quarters the Coimbatore Golf links were surveyed and plotted.

The chief works undertaken on this tour, in addition to sylvicultural and botanical expeditions, were the construction and carbonisation of a charcoal kiln, the erection of a life size model of Girder Bridge, the survey and plotting of a site for the permanent camp, and the survey of a coupe.

Towards the end of this tour the division as a whole suffered severely from ill-health—so much so that at Ayalur it was necessary to abandon the rest of the tour—and on return to head-quarters the Principal found it advisable to close the college and to advance the date of the vacation by three weeks.

During the vacation occurred the lamented death of student Cross. With reference to the circumstances attendant on the decease of this student the Principal addressed the Forest Commissioner in his No. 150 of 1913, dated 30th March 1913.

On April 9th shortly before the commencement of the hill tour term the foundation stone of the new College was laid by His Excellency the Governor in the presence of a large and representative assembly of Forest and other officers and general public. The President of the Board of Visitors and the permanent Principal were unavoidably absent, but Mr. F. A. Lodge, C.I.E. (Member of the Board of Visitors and Conservator of Forests), in an address to His Excellency ably summarised the history and present position of forest policy in this Presidency, and demonstrated the justification of the large expenditure incurred on the new Forest College.

From May 6th till June 21st the division was in camp on the Nilgiris mainly at Ootacamund. With the aid of previous reports and records the eucalyptus and conifer plantations were thoroughly and comprehensively studied. Visits were also paid to Sholas, to the Government gardens, the eucalyptus oil factory, Sims' Park at Coonoor and the Pasteur Institute. The students were practised in the manufacture of charcoal in a permanent kiln. At the desire of the District Forest-officer a road was traced round through cairn hill. Special attention was paid to the peculiar flora of the Nilgiris. The museum in the Government gardens and the observatory on Dodabetta were visited.

On return to head-quarters the Coimbatore Protestant cemetery was surveyed at the request of the Chaplain. The final examination in physical science was also held—Mr. A. W. Lushington (Member of the Board of Visitors) being present at the oral.

Periodical (written, oral and practical) examinations in all subjects were also held about every three months throughout the year. While on tour sylvicultural lectures were given almost continuously, and on the other subjects of the curriculum as circumstances dictated.

CHAPTER IV.

General.

The college in spite of considerable difficulties inseparable from the starting of a novel institution, has had on the whole a successful year. The temporary and somewhat cramped accommodation available and the very circumscribed environment have necessarily resulted in a considerable degree of discomfort and even of hardship, which in all cases has been met in a cheerful and uncomplaining spirit. After the arrival of the staff, the conversion of the old hospital into a temporary college and of a private house into a temporary hostel involved considerable structural alteration,

and a large expenditure of time and thought. In this matter, as well as in arranging for furniture and fixings, Mr. Subrahmanya Ayyar has displayed the knowledge, capacity and assiduity that have characterised his performance of the multifarious duties and details devolving upon him as house tutor. Similarly, at the close of the year Mr. Venkataramana Ayyar has been of great assistance in obtaining, and retaining, in spite of more than passive obstruction, the building originally earmarked for the second hostel.

It was soon realised that the first hostel was insufficient for the accommodation of the whole division. Eight students were therefore allowed to live at the Young Men's Christian Association hostel; but the arrangement owing to the local disabilities did not work very satisfactorily, and these students have been replaced in No. 1 hostel, where owing to the casualties of the year, there is now more accommodation.

The changing of camp on tour has involved a not inconsiderable amount of discomfort—and even loss—to the students. Permanent camps, for some of which estimates have been submitted, in various parts of the Presidency are a real necessity to ensure during touring the maximum of benefit with the minimum of hardship. The difficulties have not been lessened by the peculiarly searching scrutiny of touring expenditure, followed by orders of recovery of what ought not unreasonably have been debited to Government.

As regards field work on tour the aim has been to combine with the educational requirements of the college, the execution of such projects and works as would be of most benefit to the District Forest-officers concerned. It has been laid down as a principle that all such undertakings are to be completely worked out and subsequently finished with, if necessary, a map or plate—or at least a formal record of results. But the taking of drawing boards into camp is discouraged as much as possible: practice in survey and engineering plates thereby doubtless suffers, but a more than commensurate advantage is gained by the increased opportunities for open-air education and general forest training.

Opportunity has always been taken to foster and develop the students' powers of observation and taste for natural history. With this object ant-hills have been opened and studied, a few lectures on elementary astronomy and star-compasses have been given, attention has been drawn to protective colouring, mimicry, and the struggle for existence.

By dividing up the students into sections under charge of a leader efforts have been made to ascertain which individuals had the best power of control and capacity to get work done. This important phase will be further developed by putting the individual members of the division in charge of gangs of watchers and coolies. The students have seen the cream of the forests in the south of the Presidency, including eucalyptus blocks of 400 tons per acre, blocks of pure teak worth nearly Rs. 200 per tree, and perhaps the most complete canopy in India (cupressus on cairn hill at Ootacamund). It is desirable now that they should examine under guidance a more degraded type of forest. Great stress has always been laid on the influence of forests over the climate and the sub-soil water level.

Both in head-quarters and in Camp sanitation has been made a feature of the first importance, and the latrines would perhaps bear comparison with those of any educational institution of the same status.

The raising of the standard of efficiency in this direction has resulted in passive resistance and partial boycott by the sweeper fraternity. This class, at all times hard to obtain in Coimbatore and consequently able to command their own terms, found little inducement in a service combating from the outset their vested interests in sloth and inefficiency. The problem always difficult has been rendered still more acute by the decision of the Accounts Department, that these college servants were not eligible for batta and the recent order of the Accountant-General that the batta already drawn for many months past is to be immediately refunded, threatens to precipitate a serious crisis. It has needed all the circumspection of the house tutor to partially and temporarily convince the menials that the increase of pay sanctioned by Government is an adequate compensation; and the victory is by no means assured yet.

The health of students has been the subject of careful thought. Their milk and water supplies on tour are now daily tested, and no student is sent out for field work or games if the Medical officer considers him unfit. At Ootacamund the adequate provision of warm clothing was ensured by a kit inspection.

Until the present Sub-Assistant Surgeon joined, the college suffered somewhat from a succession of Medical officers who were not altogether suitable for the post.

The senior division as at present constituted, though of not a high intellectual standard, presents a good average of endeavour. The students generally speaking are doing their best to profit by their advantages. Their knowledge of English is ample, but progress has been greatly retarded by the very mediocre attainments in mathematics of the majority. The question of insisting on a somewhat high mathematical standard for all students before entrance and of abolishing the college Mathematical course, thereby rendering available several hours a week for forest subjects proper, will be laid before the next meeting of the Board of Visitors.

The Dehra Dun manual, which has been adopted as the text-book for sylviculture, requires as soon as possible extensive modification and additions, to render it suitable for South Indian requirements. Subsequently, the Dehra manuals of Forest Utilization and Botany should be similarly adapted for the local needs. For the sylvicultural lectures recourse has been freely made to current professional literature. Forest periodicals and pamphlets are also circulated to the students.

In response to a notice issued by Mr. A. W. Lushington a sum of over Rs. 500 was collected during the year from Forest officers as a memorial to the late Charles Brasier. This sum has been accepted by the Board of Visitors as a capital fund, of which the interest is to be awarded annually to the student likely to make the best practical Forest officer.

It is understood that the Campbell Walker Prize is to be transferred from Dehra Dun to the Madras Forest College.

Physically the students for the most part are a well set up body of young men. They have been greatly handicapped by the lack of facilities for games. Their numbers were small: it was difficult to procure space: owing to the exigencies of the first year of touring the time in head-quarters was rather cut up: the initial expenses were naturally heavy, and except for a grant of Rs. 100,—funds had to be provided entirely from individual contributions. Consequently athletics during the past year have rather languished. But with the advent of the junior division and the addition of an Imperial Instructor, the outlook is now much brighter.

The necessity for a second Imperial Instructor has been accepted by the Board of Visitors and laid before the Forest Commissioner in detail.

The work of the year has been heavy for all members of the staff. It has been accentuated by the large number of necessary buildings and projects at the new site which had been omitted from the final estimates, and for the construction of preparation of which justification had to be shown and sanction obtained: *e.g.*, quarters for clerks, sub-assistant surgeon, havildars, etc., gymnasium, carpenter's shop, carriage shed, athletic pavilion and ground; and electric lighting of the buildings, etc. The labour of preparing most of these estimates with their designs devolved on the Provincial Instructors, and in particular on Mr. Venkataramana Ayyar. This work is far from complete yet, and it is not improbable that in the near future a Post and telegraph office, hospital, police station and school, all common to the Forest and Agricultural Colleges, will be required.

It is important that the Gass Forest Museum should be moved to the new site as soon as, or before, the students take up their residence there, in order that they may continuously enjoy the great advantage of studying for themselves in the museum the products, processes, and paraphernalia discussed in the lectures. It will therefore be desirable to construct a temporary and cutcha building containing two lecture rooms, instructors' rooms, and offices. Proposals will be submitted as soon as possible.

The duties and scope of superior staff cover a much larger field than that of simple lecturing. For example the preparation of the very extensive and detailed

estimates for furniture and fittings demanded by the Department of Public Works was carried out by all the officers in consultation : the laying out of avenues and the arboretum has devolved on the third Provincial Instructor, etc., etc.

The addition of a designer, freehand draughtsman and artist is a pressing necessity. Economy would be effected and efficiency probably not impaired by combining the post with that of assistant curator, photographer, and if feasible accounts lecturer.

The periodical checking of the college stores and stock already amounting to over Rs. 22,000 involves a heavy strain on the superior staff. When the transfer to the new site has been effected, the quantity and value will be so greatly increased that special arrangements will probably be necessary for its custody and for its systematic examination by professional stock-takers.

From every point of view it is a serious misfortune that the new site consists wholly of black cotton soil. The cost of the arboretum, athletic ground, and roads will as a consequence be exceptionally high as regards both capital and maintenance charges. Under the supervision of the Imperial Instructor and second Provincial Instructor, experiments are being made to ascertain what combination of artificial top-soil over the pure black cotton will yield the best practical surface for the athletic ground.

During the year the Principal was deputed to visit the Imperial Forest College at Dehra Dun and submitted to the Forest Commissioner detailed notes and recommendations, the majority of which were given effect to. The school of Military Engineering in Bangalore was visited by the second Provincial Instructor, with beneficial results to the college engineering course.

The Principal begs to place on record his lively sense of the whole-hearted devotion to the interests of the college displayed by all members of the staff.

The calls on the time, patience, energy, and tact of the house tutor in particular have been unceasing and have always met with an immediate and adequate response. The office staff under the head clerk, Mr. K. Pattabirama Ayyar, and the Storekeeper, A. Marudachallam Pillai have carried out their duties efficiently. The influence of the Havildar has been always for the good, and he has, in the opinion of the Principal, more than justified his appointment.

The cordial thanks of the Principal, staff and students are due to the District Forest officers in whose divisions the touring has been undertaken, for the erection of camps and for general and very material assistance.

It would be unbecoming to conclude the first administration report of the Madras Forest College without recording the great and ready assistance received from Mr. F. A. Lodge, C.I.E. At all times he has been prepared to place at the service of the College his experience and advice in cases of difficulty or doubt.

Of especial value has been his first hand knowledge of the history of the negotiations leading up to the starting of the college, for the very inception of which he has been mainly responsible. Before the Principal arrived the greater part of the spade work had already been undertaken and completed by Mr. F. A. Lodge, C.I.E., with the assistance of Messrs. Fischer and Subrahmanya Ayyar.

To the labours of these officers, the College, and consequently the department as a whole, are under no small obligation.

F. C. L. COWLEY-BROWN,
Principal.

18*th August* 1913.

APPENDIX I.

MADRAS FOREST COLLEGE, COIMBATORE.

Class of 1912—14.

Number.	Names of students.	Circle and district to which attached.	Rank.	Educational qualifications.
		Western Circle.		
1	C. P. Garudachala Mudaliyar.	Coimbatore, South ..	Ranger V	Matriculation.
2	A. J. Lemerle	Do. North ..	Deputy Ranger II ..	*Nil.*
3	K. Karunakara Nambiar.	Malabar, South	Do. ..	Matriculation.
4	A. Nicholas	Canara, South	Ranger VI	Do.
		Southern Circle.		
5	L. R. Narayana Ayyar ..	Madura	Ranger V	Matriculation.
6	R. Subrahmanya Ayyar ..	Do.	Do. VI	*Nil.*
7	L. J. Taylor	Tinnevelly	Do. V	High School Examination.
8	S. Thungasami Cross ..	Do.	Do. VI	Matriculation.
9	R. E. Lemos	Salem, North	Do. VI	Do.
10	Muhammad Asadulla Ghatala.	Do.	Do. VI	*Nil.*
11	V. D. Ramalingham ..	Do.	Deputy Ranger II ..	Matriculation.
12	S. Sundaravaradachari ..	South Arcot	Do. ..	F.A.
		Central Circle.		
13	E. H. Roze	Cuddapah, East	Ranger V ..	*Nil.*
14	H. Tammiah	Do.	Do. VI ..	Matriculation.
15	P. S. Varadakrishnamachari.	Do.	Deputy Ranger II ..	Do.
16	C. Varadarajulu Nayudu.	Nellore	Ranger VI	Do.
17	John Martin	Anantapur	Do.	*Nil.*
18	T. T. Ansep	Do.	Do.	Matriculation.
19	S. M. Razvi	Guntūr	Do.	*Nil.*
20	M. Venkatappayya ..	Do.	Deputy Ranger II ..	Matriculation.
21	S. Chidambara Ayyar ..	Do.	Do. ..	Do.
22	S. Chinnadorai	Chittoor	Do. ..	F.A.
23	N. E. Kanakiah	Bellary	Do. ..	Matriculation.
		Northern Circle.		
24	C. S. King	Vizagapatam	Ranger VI	*Nil.*
25	N. K. Sarma	Ganjām	Deputy Ranger II ..	Matriculation.
26	M. Krishna Rao	Gōdāvari, Lower ..	Do. ..	Do.
27	B. V. Nagaraja Ayyar ..	Kurnool, South	Do. ..	Do.
28	C. G. Ganapathy ..	Do.	Do. ..	*Nil.*
29	B. Krishnaswamy Rao ..	Do.	Do. ..	*Nil.*
30	C. G. Krishna	Kurnool, West	Do. ..	Entrance Examination, Allahabad University.
31	D. Ramakrishniah ..	Do.	Do. ..	Matriculation.

APPENDIX II.

FORM No. 80.

Summary of Revenue and Expenditure of the Madras Forest College for the forest year ending with 30th June 1913.

Head of Service.	Amount. Rs.	A.	P.
Receipts.			
V (*b*)	1,762	7	5
A. Expenditure.			
A-I (*a*)	— 1	9	7
(*b*)	— 25	4	9
(*c*)	— 3	9	9
A-VI (*c*)	7,492	11	1
A-VII (*b*)	1,203	12	4
(*c*)	5	15	0
A-VIII (*e*)	2,247	15	9
(*g*)	237	15	1
A-IX (*b*)	39	10	4
Total ...	11,197	8	6
B. Establishments.			
B-I (*b*)	25,204	10	0
(*c*)	15,482	8	7
(*d*)	1,928	9	5 *
II (*b*)	3,992	3	11
(*c*)	4,972	5	7
(*d*)	728	5	4
III (*a*)	991	15	8
(*b*)	337	8	0
(*d*)	6,438	3	2
Total ...	60,076	5	8

* Includes Rs. 3-0-2 pay and famine batta of a peon on the temporary establishment.

APPENDIX III.

FORM No. 85.

Abstract showing the value of live stock, stores, tools and plant for the year ending 30th June 1913.

District.	Description of stock.	On hand at commencement of the year (on 1st July 1912). Number.	Value. Rs. A. P.	On hand at end of the year (on 30th June 1913). Number.	Value. Rs. A. P.	Difference in value. In favour of the year. Rs. A. P.	Against the year. Rs. A. P.
Madras Forest College, Coimbatore.	Surveying and other instruments.	569	*5,013 4 3	493	*5,115 0 3	101 12 0	..
	Tools	214	375 10 6	214	375 10 6	..	..
	Furniture	338	1,748 1 8	280	1,526 3 8	..	221 14 0
	Scientific apparatus ..	..	..	2,474	2,422 6 0	2,422 6 0	..
	Tents	..	..	84	7,595 0 3	7,995 0 3	..
	Uniforms	6	12 9 0	62	201 14 0	189 5 0	..
	Miscellaneous	58	487 8 0	406	1,363 5 9	875 13 9	..
	Total ..	1,185	7,637 1 5	4,013	18,999 8 5	11,362 7 0	..

* The value of 1 " Y " level and 1 Dumpy's level are not included in the list, as their value is not known.

TABLE OF CONTENTS.

	PAGE
Appendix A.—District areas and forest reserves	i & ii
Do. B.—Particulars of balance of lands under settlement	iii to v
Do. C.—Statement showing the area of reserved forests for which final maps have been prepared	vi
Do. D.—Abstract of fires	vii & viii
Do. E.—Comparative statement of impounded cattle	ix
Area of reserved forests and reserved lands (No. 65)	x to xx
Progress made in, and the expenditure incurred on, forest settlements (No. 66)	xxi to xxix
Record of demarcation and maintenance of boundaries (No. 67)	xxx & xxxi
Forest areas surveyed and under survey (No. 68)	xxxii to xxxv
Progress made in working plans (No. 69)	xxxvi & xxxvii
Communications and buildings (No. 70)	xxxviii to liii
Register of breaches of Forest Rules (No. 71)	liv to lxxi
Appendix to Annual Form No 71	lxxii to lxxv
Area of forest tracts protected from fire (No. 72)	lxxvi to lxxix
Area closed and open to grazing (No. 73)	lxxx & lxxxi
Return of grazing in the State forests (No. 74)	lxxxii to lxxxvi
Artificial reproduction (No. 75)	lxxxvii to lxxxix
Statement showing the outturn of timber, fuel and bamboos and agency of exploitation (No. 76)	xc to cvii
Outturn of minor forest produce (No. 77)	cviii & cix
Account of timber, etc., in depots and sold locally (No. 78)	cx to cxiii
Statement showing the value of timber and other produce at Sale depots (No 79)	cxiv to cxvi
Summary of revenue and expenditure (No. 80)	cxvii to cxxvii
Summary of the above prepared in the Board's office	cxxviii & cxxix
Outstandings and liabilities on account of contractors and disbursers (No. 81)	cxxx
Revenue received and outstandings on account of revenue (No. 82) ...	cxxxi
Statement of financial results (No. 83)...	cxxxii
Statement of elephants, etc. (No. 84)	cxxxiii & cxxxiv
Abstract of value of stores, tools and plant (No. 85)	cxxxv

APPENDICES.

APPENDIX A.—District areas and Forest reserves (1912-13).

District.	(a) Total area including feudatory and tributary States.	(b) Area excluding zamindari, whole inam villages and minor inam in ryotwari tracts.	(b) Occupied area.	Particulars of remaining area (columns 3 — 4).		
				(b) Unoccupied cultivable, uncultivable and forest areas.	(a) Areas for which records are not available.	Total of columns 5 and 6.
1	2	3	4	5	6	7
Northern Circle.	ACS.	ACS.	ACS.	ACS.	ACS.	ACS.
Ganjām	5,362,976	2,872,571	439,809	668,547	1,764,215	2,432,762
Vizagapatam	11,022,477	846,602	183,738	662,864	..	662,864
Gōdāvari	3,980,698	2,125,848	590,904	1,581,452	3,492	1,534,944
Kistna	3,780,254	1,640,370	1,008,951	618,533	12,886	631,419
Kurnool	4,699,447	3,904,466	1,511,886	2,392,580	..	2,392,580
Total ..	28,845,852	11,389,857	3,735,288	5,873,976	1,780,593	7,654,569
Central Circle.						
Bellary	3,656,339	2,983,587	1,959,132	1,024,455	..	1,024,455
Anantapur	4,299,968	3,714,191	1,783,319	1,930,872	..	1,930,872
Guntūr	3,670,687	2,919,944	1,848,836	1,071,108	..	1,071,108
Cuddapah	3,771,968	3,220,576	963,372	2,257,204	..	2,257,204
Nellore	5,103,053	2,326,957	945,542	1,381,415	..	1,381,415
Chingleput	1,965,283	1,287,006	674,571	612,435	..	612,435
Chittoor	3,631,782	1,757,114	457,357	1,299,757	..	1,299,757
Total ..	26,099,080	18,209,375	8,632,129	9,577,246	..	9,577,246
Southern Circle.						
North Arcot	3,033,517	2,550,140	1,092,650	1,457,490	..	1,457,490
South Arcot	2,693,229	2,413,330	1,529,027	884,303	..	884,303
Salem	(c)4,031,872	3,120,475	1,111,310	2,009,165	..	2,009,165
Trichinopoly	3,158,521	2,253,137	1,554,816	698,321	..	698,321
Tanjore	2,375,386	1,583,774	1,145,933	437,841	..	437,841
Madura	3,146,485	2,075,835	1,154,956	920,879	..	920,879
Rāmnād	3,159,226	447,166	264,987	182,179	..	182,179
Tinnevelly	2,744,237	1,796,590	1,206,568	590,022	..	590,022
Total ..	24,342,473	16,240,447	9,060,247	7,180,200	..	7,180,200
Western Circle.						
South Canara (c)	2,573,421	2,573,421	817,328	1,754,039	2,054	1,756,093
Malabar (c)	3,708,410	3,694,880	1,306,296	2,388,584	..	2,388,584
The Nilgiris	646,061	651,212	(c) 188,106	463,106	..	463,106
Coimbatore	4,989,867	4,557,986	2,512,163	2,045,823	..	2,045,823
Total ..	11,917,759	11,477,499	4,823,893	6,651,552	2,054	6,653,606
Grand Total ..	91,205,164	57,317,178	26,251,557	29,282,974	1,782,647	31,065,621

(a) Area by professional survey.

(b) Area according to village maps.

(c) Revised figure furnished by the Collector.

APPENDIX A.—District areas and Forest reserves (1912–13)—*cont.*

District.	Reserved forests and reserved lands.			Percentage of column 10 to column 3.	Percentage of column 10 to column 7.
	Reserved forests under Act V of 1882.	Reserved lands.	Total of reserves (columns 8 and 9).		
	8	9	10	11	12
Northern Circle.	ACS.	ACS.	ACS.		
Ganjām	360,871	47,741	408,612	14·22	16·80
Vizagapatam	193,832	6,515	200,347	23·66	30·22
Gōdāvari	532,389	111,133	643,522	30·27	41·92
Kistna	178,231	2,801	181,032	11·04	28·67
Kurnool	1,687,377	94	1,687,471	43·22	70·52
Total ..	2,952,700	168,284	3,120,984	27·40	40·77
Central Circle.					
Bellary	400,539	40,858	441,397	14·79	43·09
Anantapur	475,321	6,953	482,274	12·98	24·98
Guntūr	521,247	..	521,247	17·85	48·66
Cuddapah	1,163,437	..	1,163,437	36·12	51·54
Nellore	476,463	7	476,470	20·47	34·49
Chingleput	133,973	19	133,992	10·41	21·87
Chittoor	537,419	16	537,435	30·58	41·35
Total ..	3,708,399	47,853	3,756,252	20·63	39·22
Southern Circle.					
North Arcot	796,024	74	796,098	31·21	54·62
South Arcot	221,126	..	221,126	9·16	25·00
Salem	879,136	33,080	912,216	29·23	45·40
Trichinopoly	215,275	2,146	217,421	9·64	31·13
Tanjore	12,461	..	12,461	0·78	2·84
Madura	426,210	16	426,226	20·53	46·28
Rāmnād	46,712	44	46,756	10·45	25·66
Tinnevelly	227,586	96	227,682	12·67	38·58
Total ..	2,824,530	35,456	2,859,986	17·61	39·83
Western Circle.					
South Canara	510,563	31	510,594	19·84	29·08
Malabar	322,823	35,868	358,691	9·71	15·01
The Nilgiris	291,327	52,569	343,896	52·80	74·26
Coimbatore	1,320,271	187,922	1,508,193	33·09	73·72
Total ..	2,444,984	276,390	2,721,374	23·71	40 90
Grand Total ..	11,930,613	527,983	12,458,596	21·04	40·10

APPENDIX B.—Particulars of balance of lands under Settlement.

District.	Forest Settlement.					
	Total number and area of blocks under settlement up to the end of 1912–13.		Total number and area of blocks constituted finally as reserved forests up to the end of 1912–13.		Balance at the end of 1912–13.	
	Number.	Area.	Number.	Area.	Number.	Area.
1	2	3	4	5	6	7
Northern Circle.		SQ. MLS.		SQ. MLS.		SQ. MLS.
Ganjām	62	639	57	564	5	75
Vizagapatam	57	313	56	303	1	10
Gōdāvari, Upper	33	527	29	428	4	99
Do. Lower	44	(*h*) 479	43	404	1	75
Kistna	75	278	75	278	..	..
Kurnool, East	27	1,001	27	1,001	..	..
Do. South	38	778	34	778	4	(*a*)
Do. West	43	858	42	858	1	(*a*)
Total ..	379	4,873	363	(*h*) 4,614	16	259
Central Circle.						
Bellary	171	(*b*) 627	168	626	3	1
Anantapur	139	754	136	743	3	11
Guntūr	180	814	180	814	..	..
Cuddapah, North	79	734	79	734	..	..
Do. East	67	1,083	67	1,083	..	..
Nellore	228	745	227	745	1	(*d*)
Chingleput	198	209	198	209	(*c*) ..	(*d*)
Chittoor	(*c*) 141	840	(*c*) 140	840	1	(*d*)
Total ..	1,203	5,806	1,195	5,794	8	12
Southern Circle.						
North Vellore	105	499	101	499	4	(*d*)
South do.	75	745	75	745	..	..
South Arcot	(*f*) 130	345	130	345	..	..
North Salem	78	838	77	792	1	46
South do	86	587	84	581	2	6
Trichinopoly	155	359	152	356	3	3
Madura	(*g*) 156	666	154	666	2	(*d*)
Tinnevelly	107	429	99	429	8	(*d*)
Total ..	892	4,468	872	4,413	20	55
Western Circle.						
South Canara	183	798	178	798	5	(*a*)
Malabar, North	30	262	29	261	1	1
Do. South	6	143	5	108	1	35
The Nilgiris	437	478	436	478	1	(*a*)
Kollegal	16	730	11	447	5	283
Coimbatore, North	24	922	20	921	4	1
Do. Central	50	363	45	353	5	10
Do. South	17	454	15	454	2	(*a*)
Total ..	763	4,150	739	3,820	24	330
Grand Total ..	3,237	19,297	3,169	18,641	68	656

(*a*) Less than half a square mile.
(*b*) Includes 63 square miles of Sāndūr leased forests.
(*c*) Revised by the Collector.
(*d*) Less than one square mile.
(*e*) Enclosures within existing Perungoli and Nandambakam reserves.
(*f*) In the previous year's return two blocks were wrongly treated as one block.
(*g*) Includes one block notified under section 4 in the previous year but omitted to be shown as brought under settlement.
(*h*) Corrected in the Board's Office.

APPENDIX B.—Particulars of balance of lands under Settlement—*cont.*

District.	Settled and reported on.								Settled but not reported on.		Settlement proceeding.	
	Notified under section 13 during 1912–13 but reservation effected only after the 30th June 1913.		With Board or Government awaiting publication of notification under section 16.		Returned by the Board for revision, remaining either with Collector, District Forest Officer or Forest Settlement Officer.		Total settled and reported on.					
	Number.	Area.	Number.	Area.	Number	Area.	Number.	Area.	Number.	Area.	Number.	Area.
	8	9	10	11	12	13	14	15	16	17	18	19
Northern Circle.		S. M.		SQ. MLS.		SQ. MLS.		S. M.		S. M.		S. M.
Ganjām	4	5	..	..	..	..	4	5	..	..	1	70
Vizagapatam ..	..	..	..	..	..	..	..	..	..	..	1	10
Gōdāvari, Upper ..	..	..	..	..	..	..	..	..	..	..	4	99
Do. Lower.	..	..	..	..	.	..	..	..	1	75	..	..
Kistna	..	..	..	..	..	..	..	..	..	..	..	..
Kurnool, East ..	..	..	..	..	..	..	..	..	..	..	..	..
Do. South ..	..	..	1	(a)	..	..	1	(a)	1	(a)	2	(a)
Do. West ..	..	..	1	(a)	..	..	1	(a)	..	..	..	..
Total ..	4	5	2	..	..	..	6	5	2	75	8	179
Central Circle.												
Bellary	..	..	2	1	..	..	2	1	..	..	1	(a)
Anantapur ..	..	..	1	1	..	..	1	1	1	10	1	(a)
Guntūr	..	..	..	..	..	..	..	..	..	..	..	..
Cuddapah, North ..	..	..	..	..	..	..	..	..	.	..	..	..
Do. East ..	..	..	..	..	..	..	..	..	..	..	.	..
Nellore	..	..	1	(a)	..	..	1	(a)	..	..	..	..
Chingleput ..	..	..	..	..	..	..	..	..	.	..	(b) ..	(a)
Chittoor	..	..	..	..	..	..	..	..	.	..	1	(a)
Total ..	..	..	4	2	..	..	4	2	1	10	3	(c)
Southern Circle.												
North Vellore ..	..	..	..	..	..	..	..	..	1	(a)	3	(a)
South do. ..	..	..	..	..	..	..	..	..	..	..	..	..
South Arcot ..	..	..	..	.	..	..	..	..	.	..	..	..
North Salem ..	..	..	..	..	..	..	..	..	1	46	..	..
South do.	..	..	..	..	..	.	..	..	..	.	2	6
Trichinopoly ..	..	..	1	1	..	..	1	1	..	..	2	2
Madura	..	..	.	.	..	..	..	..	..	..	2	(a)
Tinnevelly ..	..	..	2	(a)	..	..	2	(a)	2	(a)	4	(a)
Total ..	..	..	3	1	..	..	3	1	4	46	13	8
Western Circle.												
South Canara ..	..	..	..	..	..	..	..	..	2	(a)	3	(a)
Malabar, North ..	..	..	..	..	..	..	..	..	..	..	1	1
Do. South ..	..	..	..	..	..	..	..	..	1	35	..	..
The Nilgiris ..	..	..	..	..	..	..	..	..	1	(a)	..	..
Kollegal	..	..	..	..	1	272	1	272	1	11	3	(a)
Coimbatore, North.	..	..	..	..	..	..	..	..	..	..	4	1
Do. Central.	..	..	..	..	..	..	..	..	..	..	5	10
Do. South.	..	..	..	..	..	..	..	..	1	(a)	1	(a)
Total ..	..	..	..	..	1	272	1	272	6	46	17	12
Grand Total ..	4	5	9	3	1	272	14	280	13	177	41	199

(a) Less than one square mile.
(b) Enclosures within existing Perungoli and Nandambakam reserves.

APPENDIX B.—Particulars of balance of lands under Settlement—*cont.*

District.	Of lands notified under section 4.																											
	1891-92.		1894-95.		1900-01.		1901-02.		1902-03.		1903-04.		1904-05.		1905-06.		1906-07.		1907-08.		1908-09.		1909-10.		1910-11.		1911-12.		1912-13.	
	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49
Northern Circle.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.
Ganjām	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	75	..	..
Vizagapatam	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	10	..	..	..	..
Gōdāvari, Upper	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	99
Do. Lower	..	..	..	..	..	..	1	75	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kistna	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kurnool, East	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Do. South	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Do. West	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	(a)	..	..	..	..
Total	..	..	..	..	..	..	1	75	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	10	6	75	7	99
Central Circle.																														
Bellary	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	1	(a)	1	(a)
Anantapur	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	10	2	1	..	..	..	..
Guntūr	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cuddapah, North	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Do. East	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nellore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	b-1	(a)
Chingleput	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	(c)	(a)	(c)	(a)
Chittoor	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	(a)
Total	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	10	2	1	1	(b)	3	(a)
Southern Circle.																														
North Vellore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	(a)	1	(a)	..	..	2	(a)
South do.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South Arcot	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North Salem	..	..	..	..	1	46	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South do.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	6	..	..	..	..	..	..
Trichinopoly	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	2	..	..	..	..	..	..
Madura	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	(a)
Tinnevelly	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	(a)	4	(a)	..	..
Total	..	..	..	..	1	46	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	5	8	5	(e)	4	(e)	4	(a)
Western Circle.																														
South Canara	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	(a)	3	(a)
Malabar, North	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Do. South	..	..	..	..	..	..	..	..	..	..	1	35	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
The Nilgiris	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	*(a)
Kollegal	..	1	272	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	11	..	..	..	..	..	..	..	..	3	*(a)
Coimbatore, North	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	d1	(a)	..	..	..	..	..	..	..	..	1	(a)	2	*(a)
Do. Central	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	(a)	4	9
Do. South	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	(a)	1	*(a)
Total	..	1	272	..	..	..	..	..	..	..	1	35	..	..	..	..	1	†(a)	1	11	..	..	..	..	..	..	5	*(a)	15	11
Grand Total	..	1	272	..	1	46	1	75	..	..	1	35	..	..	..	..	1	(a)	1	11	2	2	6	18	9	11	16	75	29	110

* Aggregate one square mile.

(*a*) Less than one square mile. (*b*) Notification under section 4 cancelled after the close of the year.
(*c*) Enclosures within existing Perungoli and Nandambakam reserves. (*d*) Renotified in 1912–13.

APPENDIX C.—Statement showing the area of reserved forests for which final maps have been prepared during 1912–13.

District.	Area of reserved forests.	Area of reserved forests for which final maps have been prepared	Remarks.
Northern Circle.	SQ. MLS.	SQ. MLS.	
Ganjām	564	564	
Vizagapatam	303	303	
Gōdāvari, Upper	428	428	
Do. Lower	404	404	
Kistna	278	153	
Kurnool, East	1,001	998	
Do. South	778	689	
Do. West	858	598	
Total ..	4,614	4,137	
Central Circle.			
Bellary	626	626	
Anantapur	743	743	
Guntūr	814	191	
Cuddapah, North	734	734	
Do. East	1,083	1,083	
Nellore	745	745	
Chingleput	209	209	
Chittoor	840	783	
Total ..	5,794	5,114	
Southern Circle.			
North Vellore	499	499	
South do.	745	578	
South Arcot	345	345	
North Salem	792	792	
South do.	581	581	
Trichinopoly	356	*335	* The Collector now reports that final maps have to be prepared for 21 square miles.
Madura	666	608	
Tinnevelly	429	420	
Total ..	4,413	4,158	
Western Circle.			
South Canara	798	681	
Malabar, North	261	..	
Do. South	108	..	
The Nilgiris	478	86	
Kollegal	447	446	
Coimbatore, North	921	919	
Do. Central	353	252	
Do. South	454	454	
Total ..	3,820	2,838	
Grand Total ..	18,641	16,247	

Appendix D.

District.	A. Fires caused by accident or through carelessness in burning fire lines.		B. Fires entering the forests by crossing exterior fire lines.		C. Fires beginning inside the reserves or fire-traced areas. Owing to carelessness or accident.							
					By workmen employed in the forests by purchasers of forest produce and by hay cutters.		By villagers, travellers, etc., passing through the forests.		By railway engines.		By lightning or by fire-balloons.	
	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.
1	2	3	4	5	6	7	8	9	10	11	12	13
Northern Circle.												
Ganjām	..	..	..	..	..	..	..	..	..	..	..	..
Vizagapatam	1	2,000	4	1,600	6	1,334	6	12,131	..	..	..	..
Gōdāvari, Upper	..	..	9	14,919	..	..	2	355	..	..	..	..
Do. Lower	..	..	12	12,878	2	1,600	38	1,856	..	..	..	..
Kistna	3	34	..	..	..	..	9	334	..	..	..	..
Kurnool, East	..	..	..	..	..	..	6	3,855	..	..	..	..
Do. South	8	17,670	7	6,902	..	..	13	13,778	2	153	..	..
Do. West	1	·20	6	1,250	2	110	16	6,672	1	6	..	..
Total	13	19,704·20	38	37,549	10	3,044	90	38,981	3	159	..	..
Central Circle.												
Bellary	..	..	..	..	..	..	1	*	..	..	..	..
Anantapur	1	20	..	..	..	..	1	980	..	..	..	..
Guntūr	..	..	..	..	..	..	14	1,360	..	..	..	..
Cuddapah, North	4	165	1	15	1	60	2	34	..	..	..	..
Do. East	..	..	..	..	2	12	9	1,421	..	..	..	..
Nellore	..	..	10	736	..	..	..	..	..	..	..	..
Chingleput	..	..	1	*	..	..	..	..	..	..	1	*
Chittoor	..	..	3	157	..	..	8	786	..	..	2	50
Total	5	185	15	908	3	72	35	4,581		..	3	50
Southern Circle.												
North Vellore	3	228	..	..	1	1	3	76	..	..	..	..
South do.	..	..	..	..	2	38	1	..	..	..	..	..
South Arcot	..	..	2	50	..	..	5	51	..	..	..	..
North Salem	2	64	..	..	..	..	6	1,572	..	..	..	..
South do.	..	..	..	..	..	..	3	335	..	..	..	..
Trichinopoly	..	..	..	..	..	..	4	195	..	..	..	..
Madura	..	..	29	4,831	..	..	1	20	..	..	..	..
Tinnevelly	2	1,460	9	1,274	..	..	3	953	..	..	5	266
Total	7	1,752	40	6,155	3	39	26	3,202	..	..	5	266
Western Circle.												
South Canara	3	507	56	3,193	3	33	64	2,332	..	..	15	312
Malabar, North †	..	..	2	2,550	..	..	..	..	..	..	..	..
Do. South †	5	148	..	..	..	..	..	..	..	..	..	..
The Nilgiris †	..	..	2	110	..	..	10	1,242	4	6	..	..
Kollegal	..	..	..	..	..	..	1	60	..	..	..	..
Coimbatore, North	8	228	..	..	1	1	22	3,437	..	..	..	..
Do. Central	1	15	5	1,078	..	..	4	88	2	50	..	..
Do. South	3	1,062	8	951	12	1,120	2	42	..	..	..	..
Total	20	1,960	73	7,882	16	1,154	103	7,201	6	56	15	312
Grand Total	45	23,601	166	52,494	32	4,309	254	53,965	9	215	23	628
Grand Total for 1911–12	57	3,808	177	215,707	29	9,144	304	141,267	3	8	2	9

* Less than one acre.

† Includes the number of fires in the areas not under special protection.

APPENDIX D—*cont.*

District.	C. Fires beginning inside the reserves or fire-traced areas—*cont.*								Causes unknown.		Total of A, B and C and causes unknown.	
	By intentional firing.						Total.					
	In order to obtain new grass.		In order to turn out game or to reduce cover.		Maliciously fired.							
	Number of fires	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.
	14	15	16	17	18	19	20	21	22	23	24	25
Northern Circle.												
Ganjām	..	..	..	..	3	105	3	105	92	51,354	95	51,459
Vizagapatam	2	1,360	..	..	..	..	14	14,825	8	699	27	19,124
Gōdāvari, Upper ..	..	..	1	3,200	..	..	3	3,555	12	100,531	24	119,005
Do. Lower ..	..	..	..	..	..	..	40	3,456	11	3,272	63	19,608
Kistna	..	..	..	..	..	..	9	334	.	.	12	368
Kurnool, East	2	1,290	..	..	..	..	8	5,145	22	97,986	30	103,131
Do. South	..		..	..	..	.	15	13,931	28	19,183	58	57,686
Do. West	4	135	..	..	6	44,012	29	50,935	29	69,245	65	121,430
Total ..	8	2,785	1	3,200	9	44,117	121	92,286	202	342,270	374	491,809
Central Circle.												
Bellary	1	70	.	..	1	9	3	79	33	15,211	36	15,290
Anantapur	2	1,850	.	..	1	640	4	3,450	123	38,634	128	42,104
Guntūr	..	..	..	..	..	..	14	1,360	..		14	1,360
Cuddapah, North ..	12	2,380	.	..	5	3,786	20	6,260	36	9,922	61	16,362
Do. East	47	10,047	..	..	2	3,060	60	14,540	25	5,940	85	20,480
Nellore	2	1,667	..	..	..		2	1,667	1	115	13	2,518
Chingleput	..	..	..	..	..	..	1	* ..	..	..	2	* ..
Chittoor	15	451	..	..	7	582	32	1,869	10	464	45	2,490
Total ..	79	16,445	..	..	16	8,077	136	29,225	228	70,286	384	100,604
Southern Circle.												
North Vellore	7	312	..	..	..	..	11	*389	19	1,520	33	2,137
South do.	16	640	..	..	2	25	21	703	5	4 0	26	1,113
South Arcot	..	..	..	..	..	..	5	51	..	..	7	101
North Salem	4	162	1	30	..	..	11	1,764	4	425	17	2,253
South do.	..	..	..	.	2	2	5	337	43	1,160	48	1,497
Trichinopoly	..	..	..	..	1	20	5	215	2	23	7	238
Madura	9	1,630	1	200	7	3,290	18	5,140	31	1,239	78	11,210
Tinnevelly	3	3,650	8	2,670	..	..	19	7,539	4	1,717	34	11,990
Total ..	39	6,394	10	2,900	12	3,337	95	16,138	108	6,494	(*a*)250	30,539
Western Circle.												
South Canara	14	308	13	613	19	729	128	4,327	22	449	209	8,476
Malabar, North † ..	..	..	..	..	1	..	1	..	1	11	4	2.561
Do. South †	1	6	..	..	..	..	1	6	1	4	7	158
The Nilgiris †	...	..	6	4,560	2	402	22	6,210	27	140	51	6,460
Kollegal	1	5,120	..	..	1	.	3	5,180	16	7,285	19	12,465
Coimbatore, North ..	1	100	3	479	1	40	28	4,057	16	961	52	5,246
Do. Central ..	3	9	..	..	6	614	15	761	11	378	32	2,232
Do. South ..	12	183	1	..	1	60	28	1,405	5	101	44	3,519
Total ..	32	5,726	23	5,652	31	1,845	226	21,946	99	9,329	418	41,117
Grand Total ..	158	31,350	34	1,1752	68	57,376	578	159,595	637	428,379	1,426	664,069
Grand Total for 1911–12.	293	149,308	35	11,336	133	62,906	799	373,878	600	345,251	1,693	938,644

(*a*) Excludes seven cases of fire in unreserves.

* Less than one acre. † Includes the number of fires in the areas not under special protection.

Appendix E.—Comparative statement of impounded cattle.

Districts.	From open forests.		From closed forests.				Total.		Average for three years ending 1912–13.
			Holding permits for open forests.	Having no permits.	Holding permits for open forests.	Having no permits.			
	1911–12.	1912–13.	1911–12.		1912–13.		1911–12.	1912–13.	
Northeren Circle.									
Ganjam ..	3,273	1,883	..	240	..	290	3,513	2,173	3,791
Vizagapatam ..	1,034	786	..	1,209	..	80	2,243	886	2,536
Gödavari, Uppper	329	53	..	379	..	..	708	53	240
Do. Lower	549	513	..	704	312	418	1,253	1,243	1,258
Kistna	2,881	1,891	274	897	686	1,146	4,052	3,723	3,810
Kurnool, East ..	7,201	4,210	..	..	..	..	7,201	4,210	3,313
Do. South ..	6,374	1,614	162	681	121	246	7,217	1,981	8,296
Do. West ..	8,904	9,418	..	1,792	..	1,514	10,696	10,932	13,462
Total ..	30,545	20,368	436	5,902	1,119	3,694	36,883	25,181	36,706
Central Circle.									
Bellary ..	9,773	13,671	1,625	3,812	2,100	3,204	15,210	18,975	14,441
Anantapur ..	7,430	8,469	355	1,280	210	2,131	9,065	10,810	9,001
Guntūr ..	11,204	16,576	4,484	10,703	..	10,263	26,391	26,839	27,292
Cuddapah, North.	3,771	3,982	170	3,210	327	2,071	7,151	6,380	7,782
Do. East ..	2,616	2,425	84	2,922	65	3,188	5,622	5,678	5,392
Nellore ..	11,045	8,361	1,350	5,392	3,[illegible]	6,838	17,787	18,913	18,729
Chingleput ..	2,714	3,526	1,055	839	[illegible]	654	4,608	4,222	4,467
Chittoor	5,427	3,605	268	4,184	1,731	2,064	9,879	8,300	9,453
Total ..	53,980	60,615	9,391	32,342	8,189	31,313	95,713	100,117	96,557
Southern Circle.									
North Vellore ..	7,044	6,487	..	2,395	620	2,054	9,439	9,161	10,068
South do. ..	5,851	4,736	28	805	760	1,683	6,684	7,179	6,963
South Arcot ..	12,795	12,363	298	1,114	295	2,451	14,207	15,109	13,936
North Salem ..	2,269	3,036	315	1,331	206	1,190	3,915	4,432	3,392
South do. ..	2,161	2,201	330	978	220	1,900	2,469	4,321	3,337
Trichinopoly ..	7,008	6,321	560	..	1,508	..	7,568	7,829	7,226
Madura	3,340	3,720	243	3,986	294	2,590	7,569	6,604	7,955
Tinnevelly *cum* Rāmnād.	1,647	1,168	338	2,298	137	702	4,283	2,007	4,531
Total ..	41,115	40,032	2,112	12,907	4,040	12,570	56,134	56,642	57,408
Western Circle.									
South Canara ..	1,053	887	..	37	11	89	1,090	987	973
Malabar, North ..	17	95	3	240	..	..	260	95	130
Do. South ..	..	..	..	210	..	164	210	164	171
The Nilgiris ..	258	372	40	160	160	103	458	635	585
Kollegal ..	1,984	2,930	487	675	249	359	3,146	3,538	2,881
Coimbatore, North.	2,822	4,058	..	484	168	1,111	3,306	5,337	4,082
Do. Central.	595	933	..	1,547	..	1,709	2,142	2,642	2,285
Do. South.	537	131	..	282	26	613	819	770	763
Total ..	7,266	9,406	530	3,635	614	4,148	11,431	14,168	11,870
Grand Total ..	132,906	130,421	12,469	54,786	13,962	51,725	200,161	196,108	202,541

ANNUAL FORM No. 65.

Forest Department, Madras Presidency.

AREA of reserved forests and reserved lands during 1912–13.

District.	Area of reserved forests.					
	Area on the 1st July 1912.		Added during the year.	Excluded during the year.	Area on the 30th June 1913.	
	Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.
1	2	3	4	5	6	7
Northern Circle.						
Ganjām	360,871	564	..	..	360,871	564
Vizagapatam	193,487	302	345	..	193,832	303
Gōdāvari, Upper	273,746	428	(*a*) 5	..	273,751	428
Do. Lower	260,692	407	..	(*a*) 2,054	258,638	404
Kistna	178,231	278	..	..	178,231	278
Kurnool, East	640,439	1,001	..	..	640,439	1,001
Do. South	497,660	778	4	..	497,664	778
Do. West	549,274	858	..	..	549,274	858
Total ..	2,954,400	4,616	354	2,054	2,952,700	4,614
Central Circle.						
Bellary	400,547	626	..	8	400,539	626
Anantapur	480,472	751	332	5,483	475,321	743
Guntūr	521,247	814	..	..	521,247	814
Cuddapah, North	470,073	734	..	..	470,073	734
Do. East	693,364	1,083	..	..	693,364	1,083
Nellore	474,328	741	3,812	677	476,463	745
Chingleput	133,988	209	1	16	133,973	209
Chittoor	537,405	(*b*) 840	14	..	537,419	840
Total ..	3,711,424	(*b*) 5,798	4,159	7,184	3,708,399	5,794
Southern Circle.						
North Vellore	319,170	499	..	..	319,170	499
South do.	476,847	745	..	..	476,847	745
South Arcot	221,126	345	..	..	221,126	345
North Salem	507,162	792	212	..	507,374	792
South do.	371,767	581	..	5	371,762	581
Trichinopoly	227,736	356	..	..	227,736	356
Madura	426,128	666	82	..	426,210	666
Tinnevelly *cum* Rāmnād	273,647	428	652	1	274,298	429
Total ..	2,823,583	4,412	946	6	2,824,523	4,413
Western Circle.						
South Canara	509,853	797	710	..	510,563	798
Malabar, North	167,361	262	..	..	167,361	† 261
Do South	69,263	108	..	..	69,263	108
The Nilgiris*	306,122	478	..	240	305,882	478
Kollegal	286,193	447	61	..	286,254	447
Coimbatore, North	589,394	921	3	188	589,209	921
Do. Central	196,360	307	29,499	35	225,824	353
Do. South	290,628	454	..	..	290,628	454
Total ..	2,415,174	3,774	30,273	463	2,444,984	3,820
Grand Total, Presidency ..	11,904,581	18,600	35,732	9,707	11,930,606	18,641

* Includes 2,930 acres of Toda patta lands. † Fraction omitted to round off total.

(*a*) Rectification of area due to adoption of India Survey figures.

(*b*) Difference between the closing and opening balance is due to conversion of acres into square miles.

Area of reserved forests and reserved lands during 1912–13—*cont.*

District.	Area of reserved lands.						Total area of reserved forests and reserved lands.
	Area on the 1st July 1912.		Added during the year.	Excluded during the year.	Area on the 30th June 1913.		
	Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
	8	9	10	11	12	13	14
Northern Circle.							SQ. MLS.
Ganjām	47,741	75	..		47,741	75	639
Vizagapatam	6,860	11	..	345	6,515	10	313
Gōdāvari, Upper	..		63,178	..	63,178	99	527
Do. Lower	47,955	75	..	..	47,955	75	479
Kistna	2,801	4	..	..	2,801	4	282
Kurnool, East	..	..	..	..	..	..	1,001
Do. South	70	..	22	4	88	..	778
Do. West	6	..	..	..	6	..	858
Total ..	105,433	165	63,200	349	168,284	263	4,877
Central Circle.							
Bellary	40,985	64	23	150	40,858	64	690
Anantapur	7,012	11	..	59	6,953	11	754
Guntūr	..	..	..	..	..	..	814
Cuddapah, North	620	1	..	620	..	..	734
Do. East	..	..	..	..	..	..	1,083
Nellore	..	..	7	..	7	..	745
Chingleput	10	..	9	..	19	..	209
Chittoor	14	..	16	14	16	..	840
Total ..	48,641	76	55	843	47,853	75	5,869
Southern Circle.							
North Vellore	8	..	72	..	80	..	499
South do.	..	..	..	..	..	..	745
South Arcot	..	..	..	..	..	..	345
North Salem	* 29,309 + 193	46	..	212	29,290	46	838
South do.	3,790	6	..	..	3,790	6	587
Trichinopoly	2,146	3	..	..	2,146	3	359
Madura	37 + 45	..	16	82	16	..	666
Tinnevelly *cum* Rāmnād	792	1	..	652	140	..	429
Total ..	36,320	56	88	946	35,462	55	4,468
Western Circle.							
South Canara	62,615	98	24	62,608	31	..	798
Malabar, North	22		623	..	645	1	262
Do. South	35,223	55	..	..	35,223	55	163
The Nilgiris	52,530	82	49	10	52,569	82	560
Kollegal	165,063	258	15,982	2	181,043	283	730
Coimbatore, North	278	..	494	3	769	1	922
Do. Central	30,585	48	5,853	30,352	6,086	10	363
Do. South	16	..	8	..	24	..	454
Total ..	346,332	541	23,033	92,975	276,390	432	4,252
Grand Total, Presidency ..	536,726	838	86,376	95,113	527,989	825	19,466

* The increase of 193 acres is due to the correct area of Bianurmalai extension being 203 acres instead of 10 acres as shown in the previous return.

Area of reserved forests and reserved lands during 1912–13.

District.	Name of forest.	Area on 1st July 1912.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1913.		Number and date of notification of addition or transfer.
		Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
				NORTHERN CIRCLE.				
				Reserved forests.				
Ganjam.	Area notified in previous years.	360,871	564	..	..	360,871	564	
				Reserved lands not transferred to reserved forests during the year.				
	Area notified in previous years.	47,741	75	..	..	47,741	75	
				Reserved forests.				
Vizagapatam.	Area notified in previous years..	193,487	302	..	..	193,487	302·32	
	Added—Pulugumala	..	..	170	..	170	0·54	No. 511, dated 18th November 1912.
	Gomulabanda	..	..	175	..	175		
	Total ..	193,487	302	345	..	193,832	302·86 or 303	
				Reserved lands not transferred to reserved forests during the year.				
	Area notified in previous years ..	6,860	10·54 or 11	..	..	6,860	10·54	
	Excluded—Pulugumala ..	..	..	..	170	170	0·54	
	Gomulabanda ..	..	..	..	175	175		
	Total ..	6,860	10·54 or 11	..	345	6,515	10	
				Reserved forests.				
Godāvari, Upper.	Area notified in previous years.	273,746	428	..	..	273,746	428	
	Added—Rekapalli	..	..	(*a*) 5·00	..	5·00	0·01	(*a*) Rectification of area due to adoption of India Survey figures.
	Total ..	273,746	428	5·00	..	273,751·00	428·01 or 428	
				Reserved lands not transferred to reserved forests during the year.				
	Area notified in previous years.	..	..	..	..	..	..	
	Added—Peddamedisileru block.	..	..	61,747·20	..	61,747·20	96·48	No. 535, dated 24th December 1912.
	Pedakonda Extension I.	..	..	788·00	..	788·00	1·23	No. 455, dated 1st October 1912.
	Tolluvada Extension V.	..	..	318·00	..	318·00	0·50	No. 163, dated 20th March 1913.
	Enukuru Extension II.	..	..	325·00	..	325·00	0·50	No. 455, dated 1st October 1912.
	Total ..	..	..	63,178·20 or 63,178	..	63,178·20 or 63,178	98·71 or 99	
				Reserved forests.				
Godāvari, Lower.	Area notified in previous years ..	260,692	407	..	..	260,692	407	
	Excluded—Papikonda	..	..	..	894	894	1·40	Rectification of area due to adoption of India Survey figures.
	Kopalli	..	..	..	404	404	0 63	
	Kovvada	..	..	..	756	756	1·18	
	Total ..	260,692	407	..	2,054	258,638	403·79 or 404	
				Reserved lands not transferred to reserved forests during the year.				
	Area notified in previous years ..	47,955	75	..	..	47,955	75	

Area of reserved forests and reserved lands during 1912-13—*cont.*

District.	Name of forests.	Area on 1st July 1912.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1913.		Number and date of notification of addition or transfer.
		Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
				NORTHERN CIRCLE—*cont.*				
				Reserved forests.				
Kistna.	Area notified in previous years..	178,231	278	..	..	178,231	278	
				Reserved lands not transferred to reserved forests during the year.				
	Area notified in previous years..	2,801	4	..	..	2,801	4	
				Reserved forests.				
Kurnool, East.	Area notified in previous years..	640,439	1,001	..	..	640,439	1,001	
				Reserved lands transferred to reserved forests during the year—Nil.				
				Reserved forests.				
	Area notified in previous years..	497,660	778	..	..	497,660	778	
	Added— Velgonda North Addition No. II.	..	..	3·82 or 4	..	3·82 or 4	0·006	No. 11, dated 17th December 1912.
	Total ..	497,660	778	3·82 or 4	..	497,664	778·006 or 778	
				Reserved lands not transferred to reserved forests during the year.				
	Area notified in previous years..	69·82 or 70	0·109 or 0·11	..	..	69·82 or 70	0·109 or 0·11	
	Added— Owk Extension II	..	..	4·45	..	4·45	0·01	No. 322, dated 1st July 1912.
	Jaladurgam Extension I ..	..	..	5·46	..	5·46	0·01	No. 10, dated 17th December 1912.
	Do. II ..	..	..	12·02	..	12·02	0 02	
	Total ..	70	0·11	21·93	..	91·93	0·15	
	Excluded— Velgonda North Addition No. II.	..	..	..	3·82 or 4	3·82 or 4	0·006	
Kurnool, South.	Total ..	70	0·11	21·93 or 22	3·82 or 4	88·11 or 88	0·144 or 0·14	
				Reserved forests.				
	Area notified in previous years..	549,274	858	..	..	549,274	858	
				Reserved lands not transferred to reserved forests during the year.				
Kurnool, West.	Area notified in previous years..	* 6	0·009	..	..	6	0·009	* This is the area notified in No. 364, dated 8th August 1912, for which wrong boundary description was given in No. 594, dated 19th October 1910.
				CENTRAL CIRCLE.				
				Reserved forests.				
Bellary ..	Area notified in previous years ..	400,547	626	..	8	400,539	626	Disafforested—*vide* G.O. No. 2533, Revenue, dated 22nd August 1912.

Area of reserved forests and reserved lands during 1912-13—*cont.*

District.	Name of forest.	Area on 1st July 1912.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1913.		Number and date of notification of addition or transfer.
		Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
	CENTRAL CIRCLE—*cont.*							
	Reserved lands not transferred to reserved forests during the year.							
Bellary—*cont.*	Area notified in previous years ..	40,985	64	..	150	40,835	64	Excluded at Settlement.
	Enclosures to Neraniki reserved forest.	..	..	23	..	23	..	G.O. No. 787, Revenue, dated 15th March 1913.
	Total ..	40,985	64	23	150	40,858	64	
	Reserved forests.							
Anantapur.	Area notified in previous years ..	480,472	751	..	..	480,472	751	
	Add—Additions to Agraharam reserved forests.	..	..	0·21	..	0·21	..	G.O. No. 2755, Revenue, dated 12th September 1912.
	Add—Additions to Cherlapalli reserved forest.	..	..	0·08	..	0·08	..	Do.
	Vengalammacheruvu extension..	..	..	58·81	..	58·81	..	G.O. No. 2932, Revenue, dated 30th September 1912.
	As per Collector's revised areas owing to wrong calculations, etc.	..	.	273·42	..	273·42	..	
	Total ..	480,472	751	332	..	480,804	751	
	Deduct—Ramagiri east and west reserves.	..	..	..	5,483	5,483	8	Disafforested—*vide* G.O. No. 194, Revenue, dated 18th January 1913.
	Net area ..	480,472	751	332	5,483	475,321	743	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years ..	7,012	11	..	..	7,012	11	
	Deduct	..	..	..	59	59	..	Transferred to reserved forests.
	Net area ..	7,012	11	..	59	6,953	11	
	Reserved forests.							
Guntur.	Area notified in previous years ..	521,247	814	..	..	521,247	814	
	Reserved lands not transferred to reserved forests during the year —Nil.							
	Reserved forests.							
North Cuddapah.	Area notified in previous years ..	470,073	734	..	..	470,073	734	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years ..	620	1	..	..	620	1	
	Excluded—Potipad tope extension and Penagovi tope.	..	..	..	620	620	1	Notification under section 26 was cancelled by the Collector.
	Total ..	620	1	..	620	..	..	
	Reserved forests.							
East Cuddapah.	Area notified in previous years ..	693,364	1,083	..	..	693,364	1,083	
	Reserved lands not transferred to reserved forests during the year—Nil.							
	Reserved forests.							
Nellore.	Area notified in previous years ..	474,328	741	..	..	474,328	745	Due to verification of maps and accurate computation of areas in connection with the preparation of the Nellore range working plan.
	Additions and exclusions in areas.	..	..	* 3,812	† 1,677	2,135		
	Net area ..	474,328	741	3,812	1,677	476,463	745	

* Includes 9·05 acres on account of the correct area of the Ugumudi reserved forest transferred from Chingleput.

† 1,642 acres on account of correct computation, etc. of areas.

0·23 disafforested in G.O. No. 1676, dated 2nd June 1911, omitted to be shown in last year's return

8·50 } „ „ „ 2003, „ 5th July 1912.
26·00 }

1,676·73

Area of reserved forests and reserved lands during 1912–13—*cont.*

District.	Name of forest.	Area on 1st July 1912. Acres.	Area on 1st July 1912. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1913. Acres.	Area on 30th June 1913. Equivalent in square miles.	Number and date of notification of addition or transfer
				CENTRAL CIRCLE—*cont.*				
				Reserved lands not transferred to reserved forests during the year.				
Nellore—*cont.*	Addition to Utukur-Varini Block C.	..	..	7	..	7	..	Notified under section 4 in G.O. No. 2003, Revenue, dated 5th July 1912. The notification was cancelled after the close of the year.
				Reserved forests.				
Dhinglepat	Area notified in previous years ..	133,988	209	..	..	133,988	209	
	Add	..	..	1	..	1	..	Due to difference in not taking ·92 acre as 1 acre in the opening balance of 1911-12.
	Total ..	133,988	209	1	..	133,989	209	
	Deduct—Area of Nandambakkam reserved forest.	..	..	..	7	7	..	Disafforested — G.O. No. 3368, Revenue, dated 7th November 1912.
	Difference in the correct area of the Ugumudi reserved forest transferred to Nellore district.	..	..	..	9	9	..	
	Net area ..	133,988	209	1	16	133,973	209	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years ..	10	..	..	..	10	..	
	Add—Nandambakkam extension II.	..	..	9	..	9	..	
	Total .	10	..	9	..	19	..	
	Reserved forests.							
Chittoor.	Area notified in previous years ..	537,405	* 840	..	..	537,405	840	
	Add—Chases Hill addition ..	..	..	7	..	7	..	G.O. No. 693, Revenue, dated 7th March 1913.
	Chittoor addition	..	..	2	..	2	..	G.O. No. 2954, Revenue, dated 2nd October 1912.
	Whiteside garden extension ..	..	..	5	..	5	..	G.O. No. 851, Revenue, dated 20th March 1913.
	Total ..	537,405	840	14	..	537,419	840	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years .	14	..	..	..	14	..	
	Add—Bommasamudram C. addition.	..	..	16	..	16	..	G.O. No. 1749, Revenue, dated 12th June 1913.
	Total ..	14	..	16	..	30	..	
	Deduct—Chases Hill addition ..	..	..	..	7	7	..	
	Chittoor Addition	..	..	..	2	2	..	
	Whiteside garden extension ..	..	..	..	5	5	..	
	Net area ..	14	..	16	14	16	..	
				SOUTHERN CIRCLE.				
				Reserved forests.				
	Area notified in previous years ..	319,170	499	..	..	319,170	499	
				Reserved lands not transferred to reserved forests during the year.				
North Vellore.	Area notified in previous years ..	8	..	..	..	..	..	
	Added—							
	Sholavaram (S. Nos. 2-A, 10-A, 12, 18 and 24-A.	..	..	18	..	..	..	G.O. No. 3697, Revenue, dated 10th December 1912.
	Karapattu extension	..	..	54	..	..	..	G.O. No. 832, Revenue, dated 18th March 1913.
	Total ..	8	..	72	..	80	..	

* Difference due to incorrect calculation of acres into square miles in the last year's closing balance.

Area of reserved forests and reserved lands during 1912–13—*cont.*

District.	Name of forest.	Area on 1st July 1912. Acres.	Area on 1st July 1912. Equivalent in square miles.	Added during the * year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1913. Acres.	Area on 30th June 1913. Equivalent in square miles.	Number and date of notification or transfer.
	SOUTHERN CIRCLE—*cont.*							
	Reserved forests.							
South Vellore.	Area notified in previous years ..	476,847	745	..	..	476,847	745	
	Reserved lands not transferred to reserved forests during the year—Nil.							
	Reserved forests.							
South Arcot.	Area notified in previous years ..	221,126	345	..	..	221,126	345	
	Reserved lands not transferred to reserved forests during the year—Nil.							
	Reserved forests.							
North Salem.	Area notified in previous years ..	507,162	792	..	..	..	.	
	Added—							
	Bianurmalai extension.. ..	..	..	203	..	..	..	G.O. No. 729, Revenue, dated 10th March 1913.
	Sanamavu extension	..	..	9	..	..	..	G.O. No. 899, Revenue, dated 27th March 1913.
	Total ..	507,162	792	212	.	507,374	792	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years ..	* 29,502	46	..	..	..	..	
	Excluded—							
	Transferred to reserved forests.	..	..	..	212	..	..	
	Net area ..	29,502	46	..	212	29,290	46	
	Reserved forests.							
South Salem.	Area notified in previous years ..	371,767	581	..	..	..	..	
	Excluded—							
	Mallapuram extension ..	..	..	..	5	..	..	G.O. No. 1280, Revenue, dated 28th April 1913.
	Net area ..	371,767	581	..	5	371,762	581	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years..	3,790	6	..	..	3,790	6	
	Reserved forests.							
Trichinopoly.	Area notified in previous years..	227,736	356	..	..	227,736	356	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years ..	2,146	3	..	..	2,146	3	
	Reserved forests.							
Madura.	Area notified in previous years ..	426,128	666	..	..	..	..	
	Added during the year—							
	Mankaradu	..	..	6·32	..	..	..	G.O. No. 2960. Revenue, dated 3rd October 1912.
	Northern slopes	..	..	45·44	..	..	..	G.O. No. 3791, Revenue, dated 19th December 1912.
	Perumalmalai	..	..	1·48	..	..	..	G.O. No. 3181, Revenue, dated 24th October 1912.
	Gunder valley extension ..	..	..	28·76	..	..	..	G.O. No. 2334, Revenue, dated 2nd August 1912.
	Total ..	426,128	666	82	..	426,210	666	

* *Vide* remarks in abstract of Form No. 65.

Area of reserved forests and reserved lands during 1912-13—*cont.*

District.	Name of forest.	Area on 1st July 1912.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1913.		Number and date of notification of addition or transfer.
		Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
	SOUTHERN CIRCLE—*cont.*							
	Reserved lands not transferred to reserved forests during the year.							
Madura—*cont.*	Area notified in previous years ..	* 82	..	..	..	..	..	
	Added—							
	Southern slopes Palni Hills.	..	..	8·81	..	..	..	G.O. No. 3013, Revenue, dated 5th October 1912.
	Kokkuparai	..	..	7·60	..	..	..	G.O. No. 1705, Revenue, dated 14th June 1913.
	Excluded—							
	Transferred to reserved forests.	..	..	..	82	..	..	
	Net area ..	82	..	16·41 or 16	82	16·41 or 16	..	
	Reserved forests							
Tinnevelly *cum* Rāmnād.	Area notified in previous years ..	273,647	428	..	..	..	..	
	Additions—							
	Srivilliputtūr ghat reserve No. V (*a*) S. Nos. 1861 B of Valaikulam and 2359 of Kollankondan.	..	..	27·45	..	..	..	G.O. No. 3826, Revenue, dated 23rd December 1912.
	Valaikulam Parambu extension.	..	..	34·33	..	..	..	G.O. No. 1642, Revenue, dated 4th June 1912.
	Addition to Srivilliputtūr ghat forest V (*a*)—							
	Sundrapandiam village ..	..	..	34·52	..	..	..	G.O. No. 1641, Revenue, dated 4th June 1912.
	Venkataswarapuram ..	..	..	34·54	..	..	..	G.O. No. 1779, Revenue, dated 17th June 1912.
	Pudupatti	..	..	49·16	..	..	..	G.O. No. 1635, Revenue, dated 4th June 1912.
	Lakshimipuram	..	..	35·60	..	..	..	G.O. No. 836, Revenue, dated 19th March 1913.
	Addition to Puliangudi, Chintamani, Vasudevanallur ghat forests IV (*a*) in Tirumalapuram.	..	..	2·23	..	..	..	G.O. No. 2959, Revenue, dated 3rd October 1912.
	Nāranapuram	..	..	7·07	..	..	..	G.O. No. 2961, Revenue, dated 3rd October 1912.
	Melpuliangudi	..	..	8·83	..	..	..	G.O. No. 2812, Revenue, dated 19th September 1912.
	Vasudevanallur	..	..	18·29	..	..	..	G.O. No. 2811, Revenue, dated 19th September 1912.
	Mela Chintamani	..	..	6·21	..	..	..	G.O. No. 2962, Revenue, dated 3rd October 1912.
	Kottamalai reserve addition ..	..	..	121·87	..	..	..	G.O. No. 3516, Revenue, dated 21st November 1912.
	Additions to Vadagarai Melpadagai reserved forest III.	..	..	70·96	..	..	..	G.O. No. 2907, Revenue, dated 27th September 1912.
	Additions to Krishnapuram extension.	..	..	12·42	..	..	..	G.O. No. 3225, Revenue, dated 29th October 1912.
	Kuttalam reserved forest III Old Survey No. 1957 E Ilanji village.	..	..	31·51	..	..	..	G.O. No. 179, Revenue, dated 17th January 1913.
	Addition II to Kottamadakki ..	..	..	156·60	..	..	..	G.O. No. 1083, Revenue, dated 10th April 1913.
	Excluded—							
	Papanasam Alwarkurichi ghat forest lower slopes II (*b*).	..	..	..	0·56	..	..	G.O. No. 3244, Revenue dated 30th October 1912.
	Total ..	273,647	428	651·59 or 652	0·56 or 1 acre.	274,298	429	

* *Vide* remarks in abstract of Form No. 65.

Area of reserved forests and reserved lands during 1912–13—*cont.*

District.	Name of forest.	Area on 1st July 1912.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1913.		Number and date of notification of addition or transfer.
		Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
	SOUTHERN CIRCLE—*cont.*							
	Reserved lands not transferred to reserved forests during the year.							
Tinnevelly *cum* Ramnad—*cont.*	Area notified in previous years.	792	1	..	..	..	..	
	Transferred to reserved forests ..	..	..	..	652	..	..	
	Net area ..	792	1	..	652	140	..	
	WESTERN CIRCLE.							
	Reserved forests.							
	PUTTUR.							
	Kalanjimale addition	..	..	6	..	6	..	No. 347, dated 19th July 1912.
	KASARAGOD.							
	Parappa addition II	..	..	(*a*)	..	(*a*)	..	No. 475, dated 29th October 1912.
	Area notified in previous years ..	509,853	..	(*b*) 704	..	510,557	..	
South Canara.	Total ..	509,853	797	710	..	510,563	798	
	Reserved lands not transferred to reserved forests during the year.							
	PUTTUR.							
	Aletti addition I	..	..	4	..	4	..	No. 474, dated 29th October 1912.
	Do. do. II	..	..	14	..	14	..	No. 218, dated 6th May 1913.
	Do. do. III	..	..	6	..	6	..	
	Area notified in previous years.	62,615	..	..	(*c*) 6 (*d*) 62,602	7	..	
	Total ..	62,615	98	24	62,608	31	..	
	Reserved forests.							
Malabar, North.	Area notified in previous years.	167,361	262	..	..	167,361	(*i*) 261	
	Reserved lands not transferred to reserved forests during the year.							
	BEGUR.							
	Ladysmith additions III and IV.	..	..	623	..	623	..	No. 33, dated 4th January 1913.
	Area notified in previous years ..	22	..	..		22	..	
	Total ..	22	..	623	..	645	1	
	Reserved forests.							
Malabar, South.	Area notified in previous years ..	69,263	108	..	..	69,263	108	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years..	35,223	55	..	..	35,223	55	
	Reserved forests.							
The Nilgiris.	Area notified in previous years..	306,122	478	..	(*e*) 3 (*f*) 237	305,882	478	No. 343, dated 29th July 1912.

(*a*) Less than one acre.
(*b*) Rectification of area due to adoption of Survey of India figures.
(*c*) Transferred to reserved forests.
(*d*) Transferred to unreserved lands.
(*e*) Disafforested.
(*f*) Wrongly included in the previous years' returns by the Collector.
(*i*) Fraction omitted to round off total.

Area of reserved forests and reserved lands during 1912-13—*cont.*

District.	Name of forest.	Area on 1st July 1912. Acres.	Area on 1st July 1912. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1913. Acres.	Area on 30th June 1913. Equivalent in square miles.	Number and date of notification of addition or transfer.
				WESTERN CIRCLE—*cont.*				
				Reserved lands not transferred to reserved forests during the year.				
	COONOOR.							
	Keti valley block	..	..	49	..	49	..	No. 503, dated 11th November 1912.
The Nilgiris—*cont.*	Area notified in previous years..	52,530	..	..	(*d*) 10 (*g*) 2,930	49,590	..	
	Total ..	52,530	82	49	2,940	49,639	77	
				Toda patta lands.				
		2,930	5	..	..	2,930	5	
				Reserved forests.				
	KOLLEGAL.							
	Doddasampagai addition (Andipalayam field No. 299).	..	..	2	..	2	..	No. 471, dated 28th October 1912.
	Area notified in previous years..	286,193	..	(*b*) 59	..	286,252	..	
	Total ..	286,193	447	61	..	286,254	447	
				Reserved lands not transferred to reserved forests during the year.				
Kollegal.	Addition to Doddasampagai extension, 1st bit.	..	..	6	..	6	..	No. 244, dated 15th May 1913.
	Chikkailur addition	..	..	66	..	66	..	No. 298, dated 4th June 1913.
	Chikkailur extension	..	..	58	..	58	..	No. 308, dated 20th June 1913.
	Area notified in previous years..	165,063	..	(*b*) 15,852	(*c*) 2	180,913	..	
	Total ..	165,063	258	15,982	2	181,043	283	
				Reserved forests.				
	TALAMALAI.							
	Vellamundy addition (field No. 32 Kuduvay village).	..	..	3	..	3	..	No. 48, dated 10th January 1913.
	Area notified in previous years..	589,394	..	..	(*e*) 188	589,206	..	Nos. 112, and 114, dated 18th March 1913.
	Total ..	589,394	921	3	188	589,209	921	
Coimbatore, North.				*Reserved lands not transferred to reserved forests during the year.*				
	Talamalai addition.. ..	..	..	226	..	226	..	No. 111, dated 14th March 1913.
	Palamalai addition	..	..	170	..	170	..	No. 115, dated 14th March 1913.
	Area notified in previous years.	278	..	98	(*c*) 3	373	..	No. 116, dated 14th March 1913.
	Total ..	278	..	494	3	769	1	
				Reserved forests.				
	METTUPALAYAM.							
	Modur Pethikuttai addition ..	.	..	19	..	19	..	No. 323, dated 1st July 1912.
	ERODE.							
Coimbatore, Central.	Survey No. 469-B of Vadamugam Vellodu tope reserve.	..	..	3	..	3	..	No. 233, dated 13th May 1912.
	ATTAPADI.							
	Attapadi block No. V ..	.	..	28,940	..	28,940	..	No. 314, dated 22nd June 1912.
	Do. VI ..							
	Area notified in previous years.	196,360	..	(*b*) 537	(*e*) 35	196,862	..	Nos. 330 and 331, dated 22nd June 1913.
	Total ..	196,360	307	29,499	35	225,824	353	

(*b*) Rectification of area due to adoption of Survey of India figures.
(*c*) Transferred to reserved forests.
(*d*) Transferred to unreserved lands.
(*e*) Disafforested.
(*g*) Transferred to "Toda patta lands" which have been shown separately.

Area of reserved forests and reserved lands during 1912-13—*cont.*

District.	Name of forest.	Area on 1st July 1912.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1913.		Number and date of notification of addition or transfer.
		Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
				WESTERN CIRCLE—*cont.*				
				Reserved lands not transferred to reserved forests during the year.				
Coimbatore, Central —*cont.*	MĒTTUPĀLAIYAM.							
	Survey Nos. 397 and 402 of Sujjalatti village in Modur reserve.	..	..	8	..	8	..	No. 109, dated 5th March 1913.
	Sundapatti addition I	..	..	8	..	8	..	No. 246, dated 14th May 1913,
	BOLAMPATTI.							
	Anaikatti block, North ..	..	..	1,124	..	1,124	..	No. 99, dated 15th February 1913.
	Do. South ..	..	..	4,713	..	4,713	..	
	Area notified in previous years.	30,585	..	..	(*a*) 28,962 (*b*) 1,390	233	..	
	Total ..	30,585	48	5,853	30,352	6,086	10	
				Reserved forests.				
	Area notified in previous years.	290,628	454	..	.	290,628	454	
				Reserved lands not transferred to reserved forests during the year.				
Coimbatore, South.	POLLACHI.							
	Anamalai reserve addition No. I	..	..	8	..	8	..	No. 472, dated 29th October 1912.
	Area notified in previous years.	16	..	..	..	16	..	
	Total ..	16	..	8	..	24	..	

(*a*) Transferred to reserved forests.

(*b*) Excluded at settlement.

ANNUAL FORM No. 66.

Forest Department, Madras Presidency.

STATEMENT showing the Progress made in, and the Expenditure incurred on, Forest Settlements during 1912–13.

ANNUAL FORM

Forest Department,

STATEMENT showing the Progress made in, and the

Name of forest district.	Area already settled at commencement of year.	Areas finally settled during the year					
		Number and date of Government Order according final sanction to the settlement.	Name of forest settled.	Area in square miles.	Expenditure incurred during the year on areas finally settled.		Entire cost per square mile of areas finally settled during the year.
					In forest accounts.	In other accounts	
1	2	3	4	5	6	7	8
							Northern
	SQ. MLS.				RS. A. P.		
Ganjām ..	564	No. 1267, Revenue, dated 30th April 1913.	Budrungu	1·15			
			Sallundi	1·28	*		
			Nagiri	1·78	..	..	..
		No. 1371, Revenue, dated 10th May 1913.	Chamundi	0·88			
Vizagapatam.	302	No. 3480, Revenue, dated 18th November 1912.	Puligumala and Gomulabanda.	0·54	..	..	..
Gōdāvari, Upper.	428	....	....	..	..	..	..
Gōdāvari, Lower.	† 404	....	....	..	..	..	..
Kistna ..	278	....	....	..	..	..	..
Kurnool, East.	1,001	....	....	..	..	..	..
Kurnool, South.	778	No. 3772, Revenue, dated 17th December 1912.	North Veligonda addition II.	0·006	..	..	..
Kurnool, West.	858	....	....	..	..	..	..
Total ..	4,613			5·636	..	..	..
							ral
Bellary ..	626	....	....	..	..	..	..
Anantapur..	743	G.O. No. 2755, Rev., dated 12th September 1912.	Agraharam additions	‡ 0·0003	..	..	..
		G.O. No. 2755, Rev., dated 12th September 1912.	Cherlopalli addition	‡ 0·0001	..	..	..
		G.O. No. 2932, Rev., dated 30th September 1912.	Vengalumma cheruvu extension.	0·09	..	..	..
Guntūr ..	814	....	....	..	..	..	..
North Cuddapah.	734	....	....	..	..	..	..
East Cuddapah.	1,083	....	....	..	..	..	..
Nellore ..	745	....	....	..	..	..	..
Chingleput.	209	....	....	..	..	..	..
Chittoor .	840	G.O. No. 851, Rev., dated 20th March 1913.	Extension to Whitesides garden.	‡ 0·01	††14 5 2	..	..
		G.O. No. 693, Rev., dated 7th March 1913.	Chases hill addition	‡ 0·003	††96 0 0	..	..
		G.O. No. 2954, Rev., dated 2nd October 1912.	Chittoor addition (Gandlapalle.)	‡ 0·007	.	..	..
Total ..	5,794			0·1104	110 5 2	..	..

* Finally settled during the year but reservation will take effect from 1st July 1913.
† Difference due to adoption of India Survey figures.
‡ As per correct calculations now made.
§ Pending attestation of Forest Settlement Officer to corrections in section 16 Notification
‖ Notification under section 16 submitted.
¶ Under correspondence.
** Notification under section 4 for this block was cancelled after the close of the year.
†† Cost of acquisition.
(a) Sale are near Donabai.

No. 66.

Madras Presidency.

Expenditure incurred on, Forest Settlements during 1912–13.

Areas undergoing settlement.						Estimate of areas in which settlement operations have not yet commenced.
At commencement of the year		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing settlement.		
Name of tract.	Area in square miles.	Name of tract.	Area in square miles.	In forest accounts.	In other accounts.	
9	10	11	12	13	14	15
Circle.						
				RS. A. P.		SQ. MLS.
Chokkapad	69·50	..	..	60 0 0	..	..
Sarugudu block VI	10·15	...	..	40 0 0	..	(*a*) 0·14
....	..	Pedamidisileru	96·48	..	..	443·52
		Pedakonda extension I ..	1·23			
		Tulluvada extension V ..	0·50			
		Enukuru extension II ..	0·50			
Coringa extension	75	....	..	..	..	..
....	..	....	..	..	..	4·38
....	..	....	..	..	..	..
West Veligonda extension I ..	0·103	Owk extension II	0·01	..	..	..
		Jaladurgam addition I ..	0·01			
		Do. do. II ..	0·02			
....	..	Paniem addition	0·009	..	..	..
	154·753		98·759	100 0 0	..	448·04
Circle.						
Sandal area near Chilkanahatti.	1	Enclosure to Neraniki Reserve.	0·04	..	..	....
Enclosures to Adōni, East and West Reserves.	0·34					
Yerrakonda extension No. II.	9·80	....	..	739 0 6	..	.... §
Budikonda extension	0·58	....	..	..	..	.... ‖
Bhadrapur extension ..	0·56	....	..	..	..	.... ¶
..	..	....	..	..	..	....
..	..	....	..	..	..	....
....	..	....	..	..	..	....
....	..	Addition to Utukur Varini Block C.	0·01	..	..	....
Perungoli extension No. II.	0·02	Nandambakkam Extension II	0·01 ‡	..	..	....
....	..	Bommasamudram C addition.	0·025	..	..	....
....	..	....	..	..	..	....
....	..	....	..	..	..	....
	12·3		0·085	739 0 6	..	..

Statement showing the Progress made in, and the Expenditure

Name of forest district.	Area already settled at commencement of year.	Areas finally settled during the year.					
		Number and date of Government Order according final sanction to the settlement.	Name of forest settled.	Area in square miles.	Expenditure incurred during the year on areas finally settled		Entire cost per square mile of areas finally settled during the year
					In forest accounts.	In other accounts.	
1	2.	3	4	5	6	7	8
							Southern
Vellore, North.	SQ. MLS. 499	....	....	..	..	..	..
Vellore, South.	745	....	....	..	..	..	..
Arcot, South.	345	....	....	..	..	..	..
Salem, North.	792	G.O. No. 729, Rev., dated 10th March 1913.	Bianurmalai extension ..	*0·32	..	..	..
		G.O. No. 899, Rev., dated 27th March 1913.	Sanamavu extension	0·001	..	..	..
Salem, South.	581	....	....	..	..	..	..
Trichinopoly.	356	....	.. .	..	..	..	..
Madura ..	666	G.O. No. 2334, Rev., dated 2nd August 1912	Gundar valley extension ..	0·04493	..	..	..
		G.O. No. 2960, Rev., dated 3rd October 1912.	Mankaradu	0·00987	....	..	..
		G.O. No. 3181, Rev., dated 24th October 1912.	Survey No. 1704-B of Panakad in Perumalmalai reserve.	0·0023	..	..	..
		G.O. No. 3791, Rev., dated 19th December 1912.	Northern slopes	0·0710(*a*)	..	..	..
Tinnevelly *cum* Ramnad.	428	G.O. No. 3826, Rev., dated 23rd December 1912.	Survey No. 1861-B of Valaikulam and No. 2309 of Kollankondan.	0·0430	..	..	..
	..	G.O. No. 1642, Rev., dated 4th June 1912.	Valaikulam parambu extension	0·0540	..	..	..
	..	G.O. No. 1635, Rev., dated 4th June 1912.	Pudupatti	0·0770	..	..	..
	..	G.O No. 1779, Rev., dated 17th June 1912.	Venkataswarapuram	0·0540	..	..	..
	..	G.O. No. 1641, Rev., dated 4th June 1912.	Sundrapandiam..	0·0540	..	..	..
	..	G.O. No. 836, Rev., dated 19th March 1913.	Lakshmipuram..	0·0560	..	..	..
	..	G.O No. 3516, Rev., dated 21st November 1912.	Kottamalai reserve additions	0·190	..	..	..
	..	G.O. No. 2907, Rev., dated 21st September 1912.	Additions to Vadagaraipadagai.	0·110	..	..	..

* Correct area as per section 16 notification.

(*a*) Omitted to be shown under settlement in the previous return.

incurred on, Forest Settlements during 1912–13—*cont.*

Areas undergoing settlement.						Estimate of areas in which settlement operations have not yet commenced.
At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing settlement.		
Name of tract.	Area in square miles.	Name of tract.	Area in square miles.	In forest accounts.	In other accounts.	
9	10	11	12	13	14	15
Circle.						
				RS.		SQ. MLS.
Survey No. 18, Vatrantangal village of Panamadangi reserve.	1·32	....	..	..	..	..
Survey Nos. 249, 250 and 251 of Kemparajapuram village, Tiruvallam plantation.	6·73	....	..	..	..	..
	8·05 acs. or ·01 sq. ml.		..	..	..	..
		Sholavaram reserve	0·0281	..	..	..
		Karapattu extension	0·0844	..	..	..
....	..	....	..	..	..	..
....	..	....	..	..	..	..
	..	....	..	..	..	..
Hudaiyadurgam	46	....	..	..	..	..
Arana	3	....	..	..	..	..
Tirthagiri	3	....	..	..	..	..
Vengur Padugais	1·00	....	..	..	..	20·70
Palamalai extension	1·39	..	..	..	..	..
V. Kanapadi extension ..	1·00	....	..	..	..	..
....	..	Southern slopes	0·0137	..	..	..
....	..	Kokkuparai	0·0118	..	..	..
....	..	....	..	..	..	..
....	..	....	..	..	..	..
Vaaikulam additions	0·0090	....	..	..	..	..
Khansapuram	0·0600	....	..	..	..	..
Alagapuri	0·0004	....	..	..	..	..
Manalodai and Tirukuttachala, Parvatam estates.	0·114	....	..	..	..	..
....	..	....	..	..	..	..
Addition VI to Kottamadaki reserved forest.	0·031	....	..	..	..	..
Addition to reserved forest II (b) in Vikrama singapuram.	0·003	.. ..	..	163	..	..
Last bit of Nadugani	0·002	....	..	..	..	..

Statement showing the Progress made in, and the Expenditure

Name of forest district.	Area already settled at commencement of year.	Areas finally settled during the year.					
		Number and date of Government Order according final sanction to the settlement.	Name of forest settled.	Area in square miles.	Expenditure incurred during the year on areas finally settled		Entire cost per square mile of areas finally settled during the year.
					In forest accounts.	In other accounts.	
1	2	3	4	5	6	7	8
							Southern.
	SQ. MLS.				RS.		
Tinnevelly *cum* Ramnad—*cont.*	..	*G.O. No. 2959, Rev., dated 3rd October 1912	Additions to R. F. No. IV (*a*) in Tirumalapuram.	0·003	..	..	..
	..	* G.O. No. 2961, Rev., dated 3rd October 1912.	Naranapuram	0·011	..	..	..
	..	* G.O. No. 2811, Rev., dated 19th September 1912.	Vasudevanallur..	0·029	..	..	..
	..	* G.O. No. 2962, Rev., dated 3rd October 1912.	Melachintamani	0·010	..	..	..
	..	* G.O. No. 2812, Rev., dated 19th September 1912.	Melapuliangudi..	0·014	..	..	..
	..	G.O., No. 1083, Rev., dated 10th April 1913.	Addition II to Kottamadakki.	0·245	..	..	..
	..	G.O. No. 179, Rev., dated 17th January 1913.	Old Survey No. 1357-E of Ilanji.	0·049	..	..	..
	..	G.O. No. 3225, Rev., dated 29th October 1912.	Addition to Krishnapuram extension.	0·020	..	..	..
Total ..	4,412			1·4681	..	..	..
							Western
South Canara.	797 (*a*) + 1	G.O. No. 2167, Rev., dated 19th July 1912.	Kalnjimale addition	·009	..	..	..
		G.O. No. 3231, Rev., dated 29th October 1912.	Parappa addition II (S. No. 326·4 of Adur village).	(*b*)	19	..	..
Total ..	798			·009	19	..	..
Malabar, North.	262 (*c*)—1	....	....	..	..	..	..
Malabar, South.	108	....	....	..	..	..	..
The Nilgiris.	478	....	....	..	..	..	..
Kollegal ..	447	G.O. No. 3206, Rev., dated 28th October 1912.	Doddasampagai addition (Andipalayam field No. 299).	·004	..	..	..
Total ..	447			·004	..	..	..
Coimbatore, North.	921	G.O. No. 132, Rev., dated 10th January 1913.	Vellamundy addition (Field No. 32 Kuduvay village.)	·005	..	..	..
Total.	921			·005	..	..	..

* Reserved Forest V (*a*) in the previous year's return is an error for IV (*a*).

(*a*) Rectification of area due to adoption of Survey of India figures.
(*b*) Less than one acre.
(*c*) Added as per re-notification.
(*d*) Fraction omitted to round off total.

Incurred on, Forest Settlements during 1912–13—*cont.*

Areas undergoing settlement.						
At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing settlement.		Estimate of areas in which settlement operations have not yet commenced.
Name of tract.	Area in square miles.	Name of tract.	Area in square miles.	In forest accounts.	In other accounts.	
9	10	11	12	13	14	15
Circle—cont.						
....	..	....	..	RS. ..	..	SQ. MLS. ..
....	..	....	..	..	..	..
..	..	....	..	..	..	..
....	..	....	..	..	..	..
....	..	....	..	..	..	..
....	..	....	..	..	..	..
....	..	....	..	..	..	..
....	..	....	..	..	..	..
	55·6194		0·1380	163	..	20·70
Circle.						
Baindur extension I ..	·003	....	..	243	..	..
Do. II	·008	....	..	469	..	..
....	..	Aletti addition I	·006	..	..	..
....	..	Do. II	·02	..	..	..
....	..	Do. III	·009	..	..	..
	·011		·035	712	..	..
....	..	Ladysmith additions III and IV.	97	..	..	..
The Silent valley	35	....	..	743	..	..
....	..	Keti valley block	·08	..	..	..
Madeswaranmalai and its extension.	246 (*a*)+26	Addition to Doddasampagai extension, first bit.	·009	..	..	2
Mambetta	12 (*a*)—1	Chikkailur addition	·103	..	..	..
	..	Chikkailur extension	·091	..	..	..
	283		·203	..	..	2
Gutialattur extension ..	·387 (*c*)+·153	Talamalai addition	·353	664	..	..
....	..	Palamalai addition	·266	..	..	..
South Bargur additions ..	·042	....	..			
	·582		·619	664	..	..

Statement showing the Progress made in, and the Expenditure

Name of forest district.	Area already settled at commencement of year.	Areas finally settled during the year.					
		Number and date of Government Order according final sanction to the settlement.	Name of forest settled.	Area in square miles.	Expenditure incurred during the year on areas finally settled.		Entire cost per square mile of areas finally settled during the year.
					In forest accounts.	In other accounts.	
1	2	3	4	5	6	7	8
							Western
	SQ. MLS.				RS.		
Coimbatore, Central.	307 (*a*) + 1	G.O. No. 1864, Rev., dated 22nd June 1912.	Attapadi block V. Do. VI.	47·39 (*d*)—2·18	..	..	..
		G.O. No. 1438, Rev., dated 13th May 1912.	Survey No. 469 B of Vadamugum Vellodu tope reserve.	·006	..	..	..
		G.O. No. 1943, Rev., dated 1st July 1912.	Modur Pethikutai addition ..	·03	..	..	..
Total ..	308			45·246	..	..	.
Coimbatore, South.	454	....	....	..	..	..	..
Grand total.	3,775			45·26	19	..	..

(*a*) Rectification of area due to adoption of Survey of India figures.
(*d*) Excluded at Settlement.

incurred on, Forest Settlements during 1912–13—*cont.*

Areas undergoing settlement.						Estimate of areas in which settlement operations have not yet commenced.
At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing settlement.		
Name of tract.	Area in square miles.	Name of tract.	Area in square miles.	In forest accounts.	In other accounts.	
9	10	11	12	13	14	15
Circle—cont.						
				RS.		SQ. MLS.
Jagir Porathi	36	Survey Nos. 397 and 402 of Sujjalatti village in Moduru reserve.	·01	..	..	..
....	..	Sundapatti addition I	·01	..	..	..
....	..	Anaikatti block, North ..	1·76	..	..	..
....	..	Do. South ..	7·36	..	..	..
	·36		9·14	..	..	..
Thalavoipatnam addition ..	·025	Anamalai reserve addition No. 1.	·01	460	..	..
	318·9		11	2,579	..	2

Annual Form No. 67.

Forest Department, Madras Presidency.

Record of Demarcation and Maintenance of Boundaries during 1912–13.

District.	Length of boundaries artificially demarcated during the year.	Length of previously existing boundaries repaired.	Length of previously existing boundaries not repaired.	Total length of artificially marked boundaries at the close of the year.	Length of boundaries still to be demarcated at close of year.	Length of natural boundaries not requiring artificial marks.	Total length of boundaries at the close of the year.	Expenditure on demarcation during the year.	
								On new work.	On repairs.
1	2	3	4	5	6	7	8	9	10
Northern Circle.	MILES.	MILES.	MILES.	MILES.	MILES.	MILES.	MILES.	RS.	RS.
Ganjām	(*s*) 29	(*t*) & (*f*) 1,045 4	(*u*) 150	(*v*) 1,228	(*w*) 131	(*x*) 80	(*y*) 1,439	(*z*) 444	(*aa*) 157 (*g*)—37
Vizagapatam	22	(*f*) 513	..	540	..	..	540	653	..
Gōdāvari, Upper ..	..	(*f*) 425	..	425	..	143	568	(*a*) 8,699	96 (*h*)—81
Do. Lower ..	..	(*f*) 638 58	105	(*b*) 793	..	(*b*) 52	(*b*) 845	..	8
Kistna	(*c*) 6	(*f*) 525	86	617	..	41	658	(*d*) 287	337
Kurnool, East ..	..	(*f*) 625 13	66	703	..	48	751	64	56
Do. South ..	..	*f*) 378 4	247	629	..	5	634	..	484
Do. West ..	2	(*f*) 512 184	220	(*e*) 918	..	101	1,019	151	18 (*h*) –2
Total ..	59	(*f*) 4,657 263	874	5,853	131	470	6,454	10,398	1,543
Central Circle.									
Bellary	..	25	1,763	1,788	..	..	1,788	..	(*i*) 451 (*h*)—21
Anantapur	8	79	1,738	1 825	..	..	1,825	99	(*j*) 2,095 (*k*) 307
Guntūr	..	9	1,383	1 392	..	..	1,392	..	(*l* 551
Cuddapah, North ..	..	(*m*) 26 (*f*) 614	738	1,378	..	29	1,407	..	(*o*) 973
Do. East ..	3	46 (*f*) 355	510	914	..	46	960	(*p*) 19	(*q*) 184 (*h*)+268
Nellore	..	(*f*) 2,079	..	2,079	..	84	2,163	..	(*r*) 267 (*h*)+785

(*a*) Includes Rs. 8,544 spent on Dupati survey for which the number of miles demarcated have not been furnished by the Collector.

(*b*) Difference between these and last year's figures is due to wrong inclusion of the boundaries of Coringa extension reserved land in previous years. (*c*) Last year's figure 5 in column 6 is incorrect.

(*d*) Demarcation of boundary between Gudumetla and Ustipalli and the Gudimetla reserve.

(*e*) Last year's figure in column 5 is wrong due to inclusion of 9 miles of internal lines.

(*f*) Cleared by forest subordinates free of cost.

(*g*) Relates to 1911-12 but adjusted by Accountant-General in 1912-13.

(*h*) Added or deducted as per Accountant-General's audited figure.

(*i*) Includes cost of cutting coupe lines demarcation planting stone slabs and whitewashing, etc., relating to coupes and of notice boards as per B.P. F. No. 1175, Mis., dated 5th August 1912.

(*j*) For clearing boundary lines and erecting cairns. (*k*) Rs. 307 for fixing stone slabs.

(*l*) Represents cost of survey stones, clearing boundary lines, cutting coupe lines and of sign boards to distinguish areas closed and of construction and repair of cairns. (*m*) Distance cleared.

(*o*) Rs. 389 on purchase of grazing sign-board, etc.
" 286 on clearing the common boundary line between Badvel and Proddatur taluks.
" 229 on other repairs.
" 69 cutting coupe lines.
973

(*p*) On clearing lines.

(*q*) On repairs.

(*r*) Represents cutting kancha lines Rs. 54
" goat lines. 11
Rectification of boundary lines .. 115
Planting slabs around reserves .. 87
267

(*s*) Excludes 109 miles of boundaries belonging to the Parlākimedi maliahs.
(*t*) Do. 229 do. do.
(*u*) Do. 4 do. do.
(*v*) Do. 342 do. do.
(*w*) Do. 25 do. do.
(*x*) Do. 6 do. do.
(*y*) Do. 373 do. do.
(*z*) Excludes Rs. 1,179 spent in the Parlākimedi maliahs.
(*aa*) Do. Rs. 43 do. do.

Record of Demarcation and Maintenance of Boundaries during 1912–13—*cont.*

District.	Length of boundaries artificially demarcated during the year.	Length of previously existing boundaries repaired.	Length of previously existing boundaries not repaired.	Total length of artificially marked boundaries at the close of the year.	Length of boundaries still to be demarcated at the close of the year.	Length of natural boundaries not requiring artificial marks.	Total length of boundaries at the close of the year.	Expenditure on demarcation during the year.	
								On new work.	On repairs.
1	2	3	4	5	6	7	8	9	10
Central Circle—cont.	MILES.	MILES.	MILES.	MILES.	MILES.	MILES.	MILES.	RS.	RS.
Chingleput	..	(*a*) (*b*) 904	..	904	..	..	904	..	(*e*) 1,169 (*e*) + 6
Chittoor	5	(*d*) (*b*)1,472	..	1,477	..	51	1,528	3	443 (*e*) + 447
Total ..	16	185 (*b*) 5,424	6,132	11,757	..	210	11,967	121	7,718
Southern Circle.									
North Vellore ..	..	1,149	..	1,149	..	7	1,156	..	96 (*e*)—72
South ,, ..	..	(*b*) 808 27	258	1,093	..	22	1,115	..	17 (*e*) + 1
South Arcot	..	1,220	..	1,220	..	..	1,220	..	(*f*) 197 (*e*)—27
North Salem	..	1,280	42	1,322	7	40	1,369	(*g*) 50	(*e*)—170
South ,, ...	..	(*b*) 636 342	165	1,143	..	5	1,148	(*h*) 90	377
Trichinopoly	..	940	67	1,007	11	24	1,042	(*i*) 65	278
Madura ..	110	(*b*) 788 64	272	1,234	320	178	1,732	4,653	782
Tinnevelly	1	217	256	474	..	14	488	20	(*e*)—2
Total ..	111	5,239 (*b*)2,232	1,060	8,642	338	290	9,270	4,878	1,577
Western Circle.									
South Canara ..	7	45 (*b*) 6	3,654	3,712	46	124	3,882	188	595
Malabar, North ..	17	159	948	1,134	54	36	1,224	492	(*k*) 167
Do. South ..	..	70	36	106	5	55	166	..	350
The Nilgiris . ..	..	4 (*b*) 122	1,488	1,614	(*l*)	299	1,913	(*p*) 212	5 (*k*) 111
Kollegal (*j*)	65	12	..	77	46 (*b*)282	87	492	2,046	(*b*) 232
Coimbatore, North ..	..	57 (*b*) 407	65	529	42	110	681	..	2,168
Do. Central.	..	32 (*b*) 258	284	574	(*m*) 19	44	637	(*n*) 42	326 (*k*) 34 (*o*) 42
Do. South ..	..	5 (*b*) 127	82	214	..	52	266	..	105 (*k*) 22
Total ..	89	394 (*b*) 920	6,557	7,960	212 (*b*)282	807	9,261	2,980	4,157
Grand Total ..	275	6,081 (*b*)13,233	14,623	34,212	963	1,777	36,952	18,377	14,995

(*a*) Difference : between the total of columns 3 and 4 of the current year and column 5 of last year is due to the transfer of 20 miles of boundary of Ugumudy Reserved Forest to the Nellore district.
(*b*) Cleared by Forest Subordinates free of cost.
(*c*) For cutting 30 chains of boundary line and erecting cairns .. Rs. 4
Cost of tar for marking trees wrongly debited to A VIII (*b*) ,, 2
Cutting 47 miles 30 chains of coupe and strip lines. .. .. ,, 227
Pay and famine batta of watchers .. .. ,, 936
1,169

(*d*) Difference : between columns 3 and 4 of this year's return and column 5 of last year's is explained by the Collector to be due to correct figures obtained for Chandragiri, Tirupati and Palmaner ranges.
(*e*) Added or deducted as per Accountant-General's figures.
(*f*) Represents expenditure on rectification of demarcation of certain reserves and renewal of slabs.
(*g*) Cost of demarcation of proposed Hudaidurgam reserve.
(*h*) Cost of demarcation of the proposed Jarugumalai, Arana and Tirthagiri blocks.
(*i*) Cost of demarcation of the proposed Sukkalampatti kombai reserve.
(*j*) Revised figures furnished by the Collector.
(*k*) Cost of cutting and clearing block, compartment and coupe lines
(*l*) Less than one mile.
(*m*) The figure given last year is reported by the Collector to be incorrect.
(*n*) Cost of preliminary demarcation.
(*o*) Cost of minor works wrongly debited to A-VIII (*a*).
(*p*) Cost of preparing stories.

ANNUAL FORM No. 68.

Forest Department, Madras Presidency.

STATEMENT of Forest areas surveyed and under survey during the year 1912-13.

District.	Areas surveyed and under survey during the year 1912-13.															
	Special surveys—Maps on 4-inch scale or over by Survey of India Department or Madras Survey.								Ordinary, included in district surveys.							
	With interior details.					Boundary surveys.			With interior details.					Boundary surveys.		
	With details of growing stock.		Without details of growing stock.						With details of growing stock.		Without details of growing stock.					
	Previous.	Of year.	Previous.	Of year.	Total cost	Previous.	Of year.	Total cost.	Previous.	Of year.	Previous.	Of year.	Total cost.	Previous.	Of year.	Total cost.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Northern Circle.	S. M.	S. M.	S. M.	S. M.	RS.	S. M.	S. M.	RS.	S. M.	S. M	S. M.	S. M.	RS.	S. M.	S. M.	RS.
Direction	..	..			..	..	..	..	.	.	..	..	..	..	..	..
Ganjām	..	..	(*a*) 584	..	..	447	..	(*b*)11,081	..	.	..	..	..	..	..	..
Vizagapatam	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gōdāvari, Upper ..	..	..	(*a*) 436	..	..	252	..	..	..	..	..	..	..	..	..	..
Do. Lower ..	..	..	(*a*) 70													
Kistna..	..	..	(*d*) 88	..	..	27	..	..	..	..	..	..	..	..	..	..
Kurnool, East .	..	..	(*d*)													
Do. South ..	..	..	2,725	..	..	937	..	..	..	.	..	..	..	..	..	..
Do. West ..	..	..														
Total ..	..	..	3,903	..	..	1,663	..	11,081	..	..	..	..	..	..	..	..
Central Circle.																
Bellary	..	..	..	..	..	..	..	..	..	..	(*g* 690	.	..	..	..	..
Anantapur	..	..	241	..	..	..	..	..	..	..	323	..	..	..	..	..
Guntūr	..	..	(*n*) 65	..	..	..	..	..	..	..	.	..	..	..	..	..
North Cuddapah ..	..	..	(*k*) 587	..	..	..	.	.	..	..	..	..	..	..	..	..
East do. ..	..	..	(*l*) 1,048	..	..	..	.	..	..	..	..	..	..	..	..	..
Nellore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chingleput	..	..	40	..	..	..	..	..	..	..	..	..	..	..	..	..
Chittoor	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..
Total ..	..	..	1,981	..	..	..	..	..	..	.	1,013	.	..	..	..	..
Southern Circle.																
North Vellore ..	..	..	499	..	..	..	..	..	..	..	..	..	..	..	..	..
South do. ..	..	..	745	..	..	..	..	..	..	..	..	..	..	..	..	..
South Arcot	..	..	68	..	2,767	145 linear miles.)	..	..	..	..	272	..	..	..	..	..
North Salem	..	..	792	..	24,366	..	..	..	..	..	..	..	..	..	..	..
South do.	..	..	541	..	..	..	..	..	..	..	..	..	..	40	..	..
Trichinopoly.. ..	..	..	66	..	25,000	124	..	246	.	..	..	..	..	280	..	..
Madura	..	..	618	..	..	..	..	..	..	..	..	..	..	..	..	..
Tinnevelly *cum* Rāmnād.	..	..	(*p*) 427 + 2	..	3,451	..	..	..	..	..	..	..	..	..	..	..
Total ..	..	..	3,758	..	55,584	269	..	246	..	..	272	..	..	320	..	..

(*a*) Rectification (includes area of enclosures also).
(*b*) Relates to Ganjām, Gōdāvari (Upper and Lower), Kistna and Kurnool (East, South and West).
(*d*) Correspondence pending with Survey of India Party regarding the accuracy of these figures.
(*g*) Includes reserved lands and leased forests.
(*k*) Last year's figures found to be incorrect when computed.
(*l*) Revised figures furnished by the Collector.
(*n*) Transferred from column 2 of the previous year's return.
(*p*) Represents the area of enclosures already surveyed and since added to Reserved forests.

Statement of Forest areas surveyed and under survey during the year 1912–13—*cont.*

District.	Areas surveyed and under survey during the year 1912–13—*cont.*								Areas remaining to be taken under survey.	Total forest area at end of year, as per Form No. 65.	Cost.		
	Chain and compass or other surveys by local officers.												
	With interior details.					Boundary surveys.							
	4-inch or over.		Under 4-inch.										
	Previous.	Of year.	Previous.	Of year.	Total cost.	Previous.	Of year.	Total cost.			Previous.	Of year.	Entire cost of all surveys to end of the year.
	18	19	20	21	22	23	24	25	26	27	28	29	30
Northern Circle.	S. M.	S. M.	S. M.	S. M.	Rs.	S. M.	S. M.	Rs.	S. M.	S. M.	Rs.	Rs.	Rs.
Direction	..	..	..	..	..	..	..	..	..	..	2,291	..	2,291
Ganjam	53	..	..	..	..	(*u*)1,630	(*v*)100	72	(*x*)..	(*y*) 639	(*z*) 21,150	(*aa*) (*c*) 1,304	(*bb*) 22,454
Vizagapatam	302	..	..	..	..	..	..	..	11	313	2,207	.. (*f*) + 93	2,300
Gōdāvari Upper .	..	..	..	16	31	95 villages.	89 villages.	(*e*) ..	..	527	7,694	2,929 (*f*) − 156	10,467
Gōdāvari Lower ..	1	..	26	..	6	540	..	796	376	479	12,458	(*c*) 638	13,096
Kistna	16	..	..	..	5	374	..	203	178	282	6,458	(*c*) 840	7,298
Kurnool, East	51	..	..	..	215	92	..	..	..	1,001	14,948	1,898	19,926
Do. South						143	..	..	143	778		2,509	
Do. West						5	..	203	280	858		(*c*) 1,071	
Total ..	423	..	26	16	257	2,784 and 95 villages.	100 and 89 villages.	1,274	988	4,877	67,206	10,689 (*f*) − 63	77,832
Central Circle.													
Bellary	15	19	..	..	661	..	..	..	..	690	6,988	1,468	8,456
Anantapur	179		..	..	..	67	..	1,775	11	754	5,397	1,452	6,849
Guntūr	29	47	..	..	294	..	..	..	507	814	16,699	1,054	17,753
North Cuddapah	(*h*) 25	(*h*) 9	..	..	..	..	..	..	(*k*) 147	734	1,11,750	633	..
East do.	..	..	..	..	..	acs. (*m*) 38	..	..	(*l*) 35	1,083		753	1,13,136
Nellore	..	..	..	..	..	s. m. (*i*) 1	..	..	(*j*) 260	745	5,639	1,263	6,902
Chingleput	..	..	..	..	..	..	..	..	..	209	3,874	* 388	4,262
Chittoor	..	..	..	..	..	..	..	..	..	840	508	† 480	988
Total ..	248	75	..	..	955	68 38 acres.	..	1,775	960	5,869	1,50,855 (*o*)+2,582	7,491 (*o*)+ 983	1,58,346 (*o*)+3,565
Southern Circle.													
North Vellore	..	..	..	..	..	..	..	..	..	499	8,079	..	8,079
South do.	..	..	..	..	..	..	..	..	..	745	12,468	(*q*) 584	13,052
South Arcot	6	..	..	..	52	..	..	..	..	345	6,783	(*q*) 468	7,251
North Salem	..	..	..	..	..	..	..	..	..	833	31,148	(*q*) 1,740	32,888
South do.	38	..	..	..	317*	398	..	149	6	587	28,368	(*q*) 1,184	29,552
Trichinopoly	27	(*r*) 1	..	..	1,264	149	..	524	109	359	35,578	(*q*) 580	36,158
Madura	..	..	..	..	..	48	..	..	..	666	6,697	(*q*) 1,220 (*f*)− 95	7,822
Tinnevelly *cum* Rāmnād ..	..	..	..	..	..	..	..	..	..	429	3,723	(*q*) 247 (*f*) + 19	3,989
Total ..	71	1	..	..	1,633	595	..	673	115	4,468	1,32,844 (*o*) +203	5,947 (*o*) +580	1,38,791 (*o*) +783

* Pay of a draftsman. † Pay of draftsman and cost of preparation of maps at the Madras Survey office.

(*c*) Includes establishment charges.
(*e*) Excludes Rs. 8,544 reported by the Collector to have been spent during the year and Rs. 9,937 in the previous years (= Rs. 18,481).
(*f*) Added or deducted as per Accountant-General's audited figures.
(*h*) Length in linear miles of spring channels surveyed.
(*i*) Omitted to be shown in the District return.
(*j*) Hill blocks to be surveyed by Survey of India to whom a list of reserves has been furnished.
(*k*) Last year's figure reported to be incorrect.
(*l*) Revised figure furnished by Collector.
(*m*) Area of Kodur red sanders plantation surveyed in the previous year but omitted to be shown last year in the District return.
(*o*) Expenditure under Direction.
(*q*) Pay of Surveyors and Draftsmen.
(*r*) Free of cost.
(*s*) Expenditure under Direction.
(*u*) Excludes 10·62 miles belonging to Parlākimedi maliahs.
(*v*) Do. 21·56 do. do.
(*x*) Do. 43·70 square miles belonging to Parlākimedi maliahs.
(*y*) Do. 75 do. do.
(*z*) Excludes Rs. 303 incurred in the Parlākimedi maliahs.
(*aa*) Do. 519 do. do.
(*bb*) Do. 822 do do.

Statement of Forest areas surveyed and under survey during the year 1912–13—*cont.*

District.	Areas surveyed and under survey during the year 1912–13.															
	Special surveys—Maps on 2-inch scale or over, by Survey of India or Madras Survey.								Ordinary, included in topographical programme of India or in district surveys.							
	With interior details.					Boundary surveys.			With interior details.					Boundary surveys.		
	With details of growing stock.		Without details of growing stock.		Total cost.				With details of growing stock.		Without details of growing stock.		Total cost.			
	Previous.	Of year.	Previous.	Of year.		Previous.	Of year.	Total cost.	Previous.	Of year.	Previous.	Of year.		Previous.	Of year.	Total cost.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	Reserved forests and reserved lands.															
Western Circle.	S. M.		S. M.	S. M.		S. M.		Rs.			S. M.		Rs.			
South Canara ..	..	..	719	..	..	592 and 25 linear miles.	..	7,390	..	..	77	..	‡ 6,594	..	..	..
Malabar, North ..	..	..	155	..	..	158 and 3 linear miles.	..	7,390	..	..	..	..	..	..	..	..
Do. South ..	1	..	108	..	..	130	..	..	..	..	2	..	..	..	..	..
			(*a*) 55													
The Nilgiris	..	..	502	..	..	..	..	..	..	..	..	..	..	..	..	..
Kollegal	..	..	446	1	..	319	..	7,574	..	..	..	..	..	..	..	..
			(*a*) 246	(*a*) 11												
			†† 26													
Coimbatore, North ..	..	..	895	..	..				..	..	* 26	..	..	..	..	..
Do. Central ..	..	..	339	..	..	7	..	..	..	..	* 16	..	..	..	..	..
Do. South ..	..	..	(*e*)—2													
			§ 447	..	..				..	..	* 7					
Total ..	1	..	3,609	1	..	1,206 and 28 linear miles.	..	22,354	..	..	128	..	6,594	..	..	..
			(*a*) 327	(*a*) 11												
Grand total, Presidency.	1	..	13,578	12	55,584	3,138 28 linear miles.	..	22,354	..	..	1,413	..	6,594	320	..	..

(*a*) Reserved lands. (*e*) Excluded at settlement.
* Area for which final maps have been prepared by the Madras Survey.
† Rectification of area due to adoption of Survey of India figures.
‡ Includes the cost of survey of 73 square miles in Coorg forests.
§ One hundred and thirty square miles resurveyed on 2-inch scale during 1909–10 and 9 square miles during 1911–12.

Statement of Forest areas surveyed and under survey during the year 1912-13—*cont.*

District.	Areas surveyed and under survey during the year 1912-13—*cont.*								Areas remaining to be taken under survey.	Total forest area at end of year, as per Form No. 65.	Cost.		
	Chain and compass or other surveys by local officers.												
	With interior details.					Boundary surveys.							
	4-inch or over.		Under 4-inch.		Total cost.	Previous.	Of year.	Total cost.			Previous.	Of year.	Entire cost of all surveys to end of the year.
	Previous.	Of year.	Previous	Of year.									
	18	19	20	21	22	23	24	25	26	27	28	29	30
Reserved forests and reserved lands—cont.													
Western Circle.		S. M.				S. M.	S. M.		S. M.	S. M.	RS.	RS.	RS.
South Canara ..	..	..	..	..	..	906	2	..	..	798	58,740	381	59,121
Malabar, North ..	..	..	..	..	..	6	..	..	106	261 (a) 1	14,301	694	14,995
Do. South ..	..	..	..	..	..	183	..	..	..	108 (a) 55	2,895	365	3,260
The Nilgiris ..	..	..	..	..	..	..	..	..	(b) 58	478 (a) 82	3,897	448	4,345
Kollegal	..	..	..	..	..	3 linear miles.	65 linear miles.	..	..	447 (a)283	98,924	1,284	1,00,685
Coimbatore, North ..	..	..	..	..	..	1	1	..	..	921 (a) 1		477	
Do. Central ..	..	..	..	..	..	..	4	..	..	353 (a)10	13,790	615	15,458
Do. South ..	..	11	..	..	..	2	..	..	..	454		1,053	
Total ..	..	11	..	..	..	1,098 and 3 linear miles.	7 and 65 linear miles.	..	164	3,820 (a) 432	1,92,547 (c) + 69 (d) + 12,476	5,317	1 97,864 (c) 69 (d)+12,476
Grand Total ..	742	87	26	16	2,845	4,545 95 villages 3 linear miles.	107 89 villages 65 linear miles	3,722	2,227	19,466	5,58,782	30,944	5,89,726

(a) Reserved lands.
(b) Reserves of less than one square mile in extent.
(c) Charges included under Direction in 1906-07.
(d) Survey of India charges in 1906-07.
(e) Excluded at settlement.

Annual Form No. 69.

Forest Department, Madras Presidency.

Progress made in working-plans during 1912–13.

District.	Areas for which working-plans have been completed and approved by the Board.		Areas for which working-plans are being compiled or have been compiled but not sanctioned.		Areas for which working-plans have still to be taken in hand.	Areas for which working-plans are not at present required.	Total forest area as in Form No. 65.	Entire cost per square mile of working-plans completed.	Remarks.
	At commencement of the year.	During the year.	At commencement of the year.	Taken in hand during the year.					
1	2	3	4	5	6	7	8	9	10
Northern Circle.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	RS.	
Ganjām	442	..	..	..	58	139	639	..	
Vizagapatam ..	145	..	28	..	15	125	313	..	
Gōdāvari, Upper ..	..	..	225	..	302	..	527	..	
Do. Lower ..	(*a*) 24	..	55	..	325	75	(*b*) 479	..	
Kistna	58	92	65	..	67	..	282	..	
Kurnool, East ..	..	..	..	..	136	865	1,001	..	
Do. South ..	115	..	(*c*) 395	..	112	156	778	1	
Do. West ..	(*c*) 438	31	..	..	..	389	858	..	
Total ..	1,222	123	768	..	1,015	1,749	4,877	1	
Central Circle.									
Bellary	259	..	105	..	326	..	690	..	
Anantapur ..	* 426	..	..	..	328	..	754	..	
Guntūr	41	..	164		609	..	814	..	
North Cuddapah ..	158	..	272	..	177	127	734	..	
East Cuddapah ..	337	..	..	..	746	..	1,083	..	
Nellore	(*d*) 118	3	..	84	540	..	745	..	
Chingleput ..	209	..	..	..	..	..	209	.	
Chittoor	527	264	..	..	49	..	840	..	
Total ..	2,075	267	541	84	2,775	127	5,869	..	
Southern Circle.									
North Vellore ..	497	..	..	..	2	..	499	..	
South do.	685 (*e*)—52	..	60	..	(*e*) 52	..	745	..	
South Arcot ..	155	..	162	..	19	9	345	..	
North Salem ..	161	..	677	..	..	..	838	..	
South do.	453	..	..	..	134	..	587	..	
Trichinopoly *cum* Tanjore.	205	..	39	..	112	3	359	..	
Madura	356	..	..	..	310	..	666	..	
Tinnevelly *cum* Rāmnād.	246	..	..	..	..	183	429	..	
Total ..	2,758 (*e*)—52	..	938	..	629	195	4,468	..	

* Difference due to disafforestation of Ramagiri reserve which was under working-plan.

† Includes 40½ sq. miles of Palakondas timber working-plan submitted to Board, but subsequently withdrawn on account of change of system suggested by the Conservator.

(*a*) Working-plans for Mallavaram and Devancheruvu reserves and Peddāpur range were cancelled in Board's Proceedings Forest Mis. No. 243, dated 20th February 1913, and Mis. No. 727, dated 25th November 1912.

(*b*) Rectification of area due to adoption of Survey of India figures.

(*c*) Collector reports that last year's figures are wrong.

(*d*) The two square miles of Sriharikota casuarina plantations shown in column 3 of last year's report is omitted as this area has been already included in the main Sriharikota sanctioned working-plan.

(*e*) Fifty-two square miles have been transferred to column 6, as the Tiruppattur Range sandalwood working-plan which ended in 1910–11 requires revision.

Progress made in working-plans during 1912–13—*cont.*

District.	Areas for which working-plans have been completed and approved by the Board.		Areas for which working-plans are being compiled or have been compiled but not sanctioned.		Areas for which working-plans have still to be taken in hand.	Areas for which working-plans are not at present required.	Total forest area, as in form No. 65.	Entire cost per square mile of working-plans completed.
	At commencement of year.	During year.	At commencement of year.	Taken in hand during year.				
1	2	3	4	5	6	7	8	9
				Reserved forests.				
Western Circle.	SQ. MLS.		SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	RS.
South Canara	589	..	2	..	207	*	798	..
Malabar, North	178	..	7	..	76	..	261	..
Do. South	7	..	..	..	95	2	104	..
The Nilgiris	103	..	6	..	369	..	478	86
Kollegal	43	..	20	2	80	302	447	..
Coimbatore, North ..	289	..	..	..	632	..	921	..
Do. Central ..	220	..	..	..	54	79	353	..
Do. South ..	75	..	..	..	35	317	427	..
Total ..	1,504	..	35	2	1,548	700	3,789	..
				Reserved lands.				
South Canara	..	..	..	..	*	..	*	..
Malabar, North	..	..	..	..	1	..	1	..
Do. South	..	..	..	..	..	35	35	..
The Nilgiris	..	..	..	..	6	..	6	..
Kollegal	10	..	..	..	80	193	283	..
Coimbatore, North ..	..	..	..	..	1	..	1	..
Do. Central ..	..	..	..	..	10	..	10	..
Do. South ..	..	..	..	..	..	*	*	..
Total ..	10	..	..	..	98	228	336	..
				Leased forests.				
Malabar, South	24	..	..	..	..	..	24	..
The Nilgiris	76	..	..	..	..	..	76	..
Coimbatore, South ..	..	..	..	..	27	..	27	..
Total ..	100	..	..	..	27	..	127	..
Total, Western Circle..	1,614	..	35	2	1,673	928	4,252	..
Grand Total, Presidency.	7,617	390	2,282	86	6,092	2,999	19,466	..

* Less than one square mile.

ANNUAL

Forest Department,

COMMUNICATIONS

District.	New work undertaken during the year.					Total expenditure on new works.
	Buildings.		Roads and paths.			
	Description of building.	Expenditure incurred.	Road or path and object of the same.	Length of road or path.	Expenditure incurred.	
1	2	3	4	5	6	7
						Northern
		RS.		MLS.	Rs.	RS.
Direction ..	....	..	....	..	..	..
	Total, Direction ..	..		..	..	..
Ganjām ..	Rest-houses	1,187	Cart-roads	10⅜	4,848	10,103
	(*a*) Houses for subordinate establishment	3,168	Bridle paths	5	36	..
			Bridge	..	252	..
	Others	612		15⅜	5,136	10,103
			Add A-VII (*c*)	..	..	358
	Total, Ganjām ..	4,967		15⅜	5,136	10,461
Vizagapatam.	Rest-houses	1,266	Cart-roads	⅛	220	3,347
	Houses for subordinate establishment	175				
	Others	1,686				
	Total, Vizagapatam ..	3,127		⅛	220	3,347
Gōdāvari, Upper.	Rest-houses	..	Cart-roads	106	3,988	4,207
	Houses for subordinate establishment	..	Add as per Accountant-General's audited figure ..	..	+ 219	..
	Others	..		..	4,207	..
			A-VII (*c*)	..	..	116
	Total, Gōdāvari, Upper ..	..		106	4,207	4,323
Gōdāvari, Lower.	Rest-houses	627	Cart-roads	4⅛	1,846	3,534
	Houses for subordinate establishment	332				
	Others	729	Add VII (*c*)	..	..	126
	Total, Gōdāvari, Lower ..	1,688		4⅛	1,846	3,660

(*a*) Excludes Rs. 105 on account of a forester's shed incurred in the Parlākimedi maliahs.

FORM No. 70.

Madras Presidency.

and Buildings.

Repairs executed during the year.					
Buildings.		Roads and paths.			Total expended on repairs.
Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired.	Expenditure incurred.	
8	9	10	11	12	13
Circle.					
	RS.		MLS.	RS.	RS.
Others	1,604	Cart-roads	$\frac{1}{16}$	55	1,659
	1,604		$\frac{1}{16}$	55	1,659
Rest-houses	2,127	Cart-roads	$18\frac{1}{8}$	371	5,689
(*b*) Houses for subordinate establishment	399	Ghat-roads	$1\frac{7}{8}$	32	..
Others	193		20	403	..
	2,719	Add as per Accountant-General's audited figure	..	+ 33	..
Add pay of establishment	2,111	Add pay of establishment	..	434	..
	4,830		20	870	5,689
Deduct as per Accountant-General's audited figure	— 11	Add A-VII (*c*)	..	..	24
		Add as per Accountant-General's audited figure	..	..	+ 11
	4,819		20	(*a*) 870	5,724
Rest-houses	499	Cart-roads	17	340	1,927
Houses for subordinate establishment	207	Add as per Accountant-General's audited figure	..	+ 1	..
Others	36		17	341	1,927
	742				
Add pay of establishment	844	Add A-VII (*c*) as per Accountant-General's audited figure	..	..	+ 105
	1,586		17	341	2,032
Rest-houses	88	Cart-roads	..	..	2,368
Houses for subordinate establishment	14	Add A-VII (*c*)	..	..	13
Others	395	Add as per Accountant-General's audited figure	..	..	+ 40
	497				
Add pay of establishment	1,861				
Add as per Accountant-General's audited figure	+ 10				
	2,368		..	..	2,421
Rest-houses	479	Cart-roads	$1\frac{1}{8}$	293	3,197
Houses for subordinate establishment	453	Add as per Accountant-General's audited figure	..	+ 1	..
Others	1,223		$1\frac{1}{8}$	294	3,197
	2,155	Add A-VII (*c*)	..	..	168
Add pay of establishment	748	Add as per Accountant-General's audited figure	..	..	+ 1
	2,903		$1\frac{1}{8}$	294	3,366

(*a*) Corrected in the Board's office.

(*b*) Excludes Rs. 25 incurred on repairs of tanna sheds in the Parlakimedi maliahs.

Communications

District.	New work undertaken during the year.					
	Buildings.		Roads and paths.			Total expenditure on new works.
	Description of building.	Expenditure incurred.	Road or path and object of the same.	Length of road or path.	Expenditure incurred.	
1	2	3	4	5	6	7
						Northern
		RS.		MLS.	RS.	RS.
Kistna ..	Rest-houses	..	Cart-roads	7¼	2,226	3,125
	Houses for subordinate establishment	426				
	Others	473				
	Total, Kistna ..	899		7¼	2,226	3,125
Kurnool, East.	Rest-houses	2,026	Cart-roads	* 13⅓	12	9,593
	Houses for subordinate establishment	6,117				
	Others	1,438				
	Total, Kurnool, East ..	9,581		13⅓	12	9,593
Kurnool, South.	Rest-houses	..	Cart-roads	26⅞	7,859	14,488
	Houses for subordinate establishment	5,745				
	Others	884				
	Total, Kurnool, South ..	6,629		26⅞	7,859	14,488
Kurnool, West.	Rest-houses	..	Cart-roads	12½	2,515	6,306
	Houses for subordinate establishment	3,775	A-VII (*e*)	..	..	2,346
	Others	16	Deduct as per Accountant-General's audited figure ..	..	..	— 5
				..	..	2,341
	Total, Kurnool, West ..	3,791		12½	2,515	8,647
Total, Northern Circle.	Rest-houses	5,106	Ghât-roads	..	..	54,703
	Houses for subordinate establishment	19,738	Cart-roads	181¾	23,514	
			Bridle-path	5	36	
	Others	5,838	Bridge	..	252	
				186¾	23,802	
			Add as per Accountant-General's audited figure ..	..	+ 219	
				186¾	24,021	..
			Add A-VII (*e*)	..	..	2,946
			Deduct as per Accountant-General's audited figure ..	..	..	— 5
				..	..	2,941
	Total, Northern Circle ..	30,682		186¾	24,021	57,644

* Aligned.

and Buildings—*cont.*

Repairs executed during the year.					
Buildings.		Roads and paths.			Total expended on repairs.
Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired.	Expenditure incurred.	
8	9	10	11	12	13
Circle—*cont.*					
	Rs.		Mls.	Rs.	Rs.
Rest-houses	87	Cart-roads	5⅜	1,393	2,442
Houses for subordinate establishment	68	Ghat-roads	14⅞	386	..
Others	152	Bridle-paths	1½	50	..
	307		21⅛	1,829	2,442
Add pay of establishment	306	Add A-VII (*a*)	..	..	1,184
	613		21⅛	1,829	3,626
Rest-houses	179	Cart-roads	26¹³⁄₁₆	3,975	8,815
Houses for subordinate establishment	21	Ghât-roads	2¾	2,287	..
Others	1,668		..	6,262	8,815
	1,868	Add A-VII (*a*)	..	..	16
Add pay of establishment	685				
	2,553		29⁹⁄₁₆	6,262	8,831
Rest-houses	211	Cart-roads	15	1,737	3,393
		Ghât-roads	13	344	..
Houses for subordinate establishment	10		28	2,081	..
Others	313	Add pay of establishment	..	65	..
	534		28	2,146	3,393
Add pay of establishment	713	Add A-VII (*a*)	.	..	1,102
	1,247		28	2,146	4,495
Rest-houses	117	Cart-roads	8¼	69	807
Houses for subordinate establishment	20				
Others	47				
	184				
Add pay of establishment	588				
	772				
Deduct as per Accountant-General's audited figure	— 34				
	738		8¼	69	807
Rest-houses	3,787	Ghât roads	32⅛	3,049	30,297
Houses for subordinate establishment	1,192	Cart roads	92	8,238	..
		Bridle-paths	1½	50	..
Others	5,631		125⅝	11,332	(*a*)30,297
	10,610	Add as per Accountant-General's audited figures	..	+ 35	..
	7,856	Add pay of establishment	..	+ 499	..
Add pay of establishment	18,466		125⅝	11,866	30,297
		A-VII (*a*)	..	..	2,507
Deduct as per Accountant-General's audited figure	— 35	Add as per Accountant-General's audited figure	..	..	+ 157
					2,664
	18,431		125⅝	11,866	32,961

(*a*) Corrected in the Board's office.

Communications

District.	New work undertaken during the year.					
	Buildings.		Roads and paths.			Total expenditure on new work.
	Description of building.	Expenditure incurred.	Road or path and object of the same.	Length of road or path.	Expenditure incurred.	
1	2	3	4	5	6	7
						Central
		RS.		MLS.	RS.	RS.
Bellary ..	Head-quarter houses	1,969	Bridle-path	1⅛	513	..
	Rest-houses	3,918	Cart-road	3	690	..
	Houses for subordinates ..	4,957	Inspection paths	50-9-19½	1,225	..
	Others	674	....	..	..	..
	Total ..	11,518	Total ..	55-2-19½	2,428	13,946
			A-VII (*o*)	..	..	388
			Sinking wells Rs. 214	..	..	
			Digging trial wells Rs. 174 ..	..	..	
	Total, Bellary ..	11,518	Total ..	55-2-19½	2,428	14,334
Anantapur ..	Head-quarter houses	160	Cart-roads	12-2-0	2,255	..
	Rest-houses	4,508	....	..		..
	Others	499	....	..	..	..
	Total ..	5,167	Total ..	12-2-0	2,255	7,422
			A-VII (*o*)	..	..	..
			Construction of wells	..	..	1,244
	Total, Anantapur ..	5,167	Total ..	12-2-0	2,255	8,666
Guntūr ..	Rest-houses	990	Cart-road	0-7-0	5	..
	Houses for subordinates ..	68	....	..	..	..
	Others	358	....	..	..	..
	Total ..	1,416	Total ..	0-7-0	5	1,421
			A-VII (*o*)	..	..	..
			Construction of wells Rs. 368.	..	..	..
			Do. dam Rs 50 ..	..	..	418
	Total, Guntūr ..	1,416	Total ..	0-7-0	5	1,83 9
North Cuddapah.	Rest-houses	2,916	Bridle-path	5	512	..
	Houses for subordinates ..	328	Cart-road	..	567	..
	Others	140	....	..	..	..
	Total ..	3,384	Total ..	5-0-0	1,079	4,463
			A-VII (*o*)	..	..	476
			Fencing Rs. 249	..	..	
			Deepening wells Rs. 136 ..	..	..	
			Others Rs. 91	..	..	
	Total, North Cuddapah ..	3,384	Total ..	5-0-0	1,079	4,939

and Buildings—*cont.*

Repairs executed during the year.					
Buildings.		Roads and paths.			Total expended on repairs.
Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired.	Expenditure incurred.	
8	9	10	11	12	13
Circle.					
	Rs.		Mls.	Rs.	Rs.
Head-quarter houses	63	....	..	..	..
Rest-houses	749	....	..	..	..
Houses for subordinates	281	....	..	..	..
Others	192	....	..	..	..
Cost of establishment	294	....	..	..	..
Deduct as per Accountant-General's audited figures.	— 224	....	..	..	..
Total ..	1,355	Total ..	..	..	1,355
		A-VII (*c*) ..	..	..	..
....	..	Repairing wells Rs. 6	..	..	..
....	..	Add as per Accountant-General's audited figures Rs. 7.	..	..	13
Total ..	1,355	Total ..	..	..	1,368
Head-quarter houses	30	Cart-road	8	550	..
Rest-houses	414	Bridle-path	¼	16	..
Houses for subordinates	283	Cost of establishment	..	336	..
Others	27	Add as per Accountant-General's audited figures.	..	1	..
Cost of establishment	890	....	..	..	..
Add as per Accountant-General's audited figures	4	....	..	..	..
		....	..	..	..
		Total ..	8¼	903	2,551
..	..	....	..	..	..
..	..	....	..	..	..
Total ..	1,648	Total ..	..	..	2,551
Head-quarter houses	2	Cart-road	1⅔	13	1,476
Rest-houses	83	Deduct as per Accountant-General's audited figures.	..	— 1	
Houses for subordinates	10	....	..	..	..
Others	288	....	..	..	..
Cost of establishment	1,081	....	..	..	..
Total ..	1,464	Total ..	1⅔	12	1,476
		Add A-VII (*c*) ..	..	..	..
....	..	Repairing salt creek Rs. 50	..	..	50
Total ..	..	Total ..	..	..	1,526
Rest-houses	523	Bridle-path	..	50	..
Others	120	Cart-roads	..	456	..
Cost of establishment	587	Others	..	10	..
..	..	Deduct as per Accountant-General's audited figures.	..	—8	..
Total ..	1,230	Total ..	..	508	1,738
		Add A-VII (*c*) ..	..	..	..
....	..	Repair of wells Rs. 191	..	..	..
....	..	Removal of silt Rs. 68	..	..	..
.. .	..	Others. Rs. 38	..	..	..
....	..	Deduct as per Accountant-General's audited figures Rs. 45.	..	..	252
Total ..	..	Total ..	..	..	1,990

Communications.

District.	New work undertaken during the year.					
	Buildings		Roads and paths.			Total expenditure on new work.
	Description of buildings.	Expenditure incurred	Road or path and object of the same.	Length of road or path.	Expenditure incurred.	
1	2	3	4	5	6	7
						Central
		Rs.		Mls.	Rs.	Rs.
East Cuddapah.	Head-quarter houses	2,163	Cart-road	18-7-3-3	1,871	..
	Rest-houses	3,408	Bridle-path	14-0-2-0	1,533	..
	Houses for subordinates ..	1,936	....	..	..	..
	Total ..	7,507	Total ..	32-7-5-3	3,404	10,911
			A-VII (*c*)	..	..	..
			Sinking well 300	..	..	300
	Total, East Cuddapah ..	7,507	Total ..	32-7-5-3	3,404	11,211
Nellore ..	Head-quarter houses	3,263	....	..	..	..
	Rest-houses	1,152	....	..	..	..
	Houses for subordinates ..	3,014	....	..	..	..
	Others	591	....	..	..	..
	Total ..	8,020	Total ..	..	..	8,020
			A-VII (*c*)	..	..	..
	Total, Nellore ..	8,020	Total ..	..	..	8,020
Chingleput ..	Rest-houses	404	....	..	..	..
	Total ..	404	Total ..	..	..	404
			A-VII (*c*)	..	..	..
			Sinking a well 180	..	..	180
	Total, Chingleput ..	404	Total ..	..	..	584
Chittoor ..	Head-quarter houses	285	Cart-road	4¾	873	..
	Rest-houses	3,389	....	..	..	..
	Houses for subordinates ..	230	....	..	..	..
	Total ..	3,904	Total ..	4-8-0-0	873	4,777
			A-VII (*c*)	..	..	..
			Sinking wells Rs. 410 ..	..	..	..
			Digging a trial well Rs. 19 ..	..	..	429
	Total, Chittoor ..	3,904	Total ..	4-8-0-0	873	5,206

and Buildings—*cont*

Repairs executed during the year.					
Buildings.		Roads and paths.			Total expended on repairs.
Nature of repairs.	Expenditure incurred.	Nature or repairs.	Length repaired.	Expenditure incurred.	
8	9	10	11	12	13
Circle—cont.					
	Rs.		Mls.	Rs.	Rs.
Head-quarter houses	676	Cart-road	..	1,576	..
Rest-houses	450	Add as per Accountant-General's audited figures.	..	6	..
Houses for subordinates	58	....	.	..	..
Others	8	....	..	..	..
Cost of establishment	615	....	..	..	..
Total ..	1,807	Total ..	..	1,582	3,389
		A-VII (*c*) ..	..	..	..
....	..	Repairing well Rs. 7	..	..	..
....	..	Removal of silt Rs. 31	..	..	38
Total ..	1,807	Total ..	..	1,582	3,427
Head-quarter houses	15	Bridle-path	3	93	..
Rest-houses	40	Deduct as per Accountant-General's audited figures.	..	— 12	..
Houses for subordinates	73	....	..	..	..
Cost of establishment	999	....	..	..	..
Total ..	1,127	Total ..	3-0-0-0	81	1,208
		A-VII (*c*) ..	..	..	..
....	..	Removal of silt Rs. 2	..	..	..
....	..	Others Rs. 68	..	..	70
Total ..	1,127	Total ..	3-0-0-0	81	1,278
Rest-houses	87	Cart-road	5	26	..
Houses for subordinates	107	Ghat road	..	54	..
Others	85	....	..	..	..
Add as per Accountant-General's audited figures.	20	Deduct as per Accountant-General's audited figures	..	— 7	..
Total ..	299	Total ..	5-0-0 0	73	372
		....	..	..	..
		....	..	..	..
Total ..	299	Total ..	5-0-0-0	73	372
Head-quarter houses	3	Bridle-path	10	20	..
Rest-houses	312	Cart-roads	49	1,042	..
Houses for subordinates	253	Others	..	4	..
Others	21	....	..	2	..
Cost of establishment	977	Add as per Accountant-General's audited figures.	..	..	..
Total ..	1,566	Total ..	59	1,068	2,634
		A-VII (*c*) ..	..	..	..
....	..	Clearing silt in wells Rs. 5	..	..	..
....	..	Others Rs 43	..	..	39
....	..	Deduct as per Accountant-General's audited figures Rs. 9.	..	..	..
Total ..	1,566	Total ..	59	1,068	2,673

Communications

District.	New work undertaken during the year.					Total expenditure on new work.
	Buildings.		Roads and paths.			
	Description of building.	Expenditure incurred.	Road or path and object of the same.	Length of road or path.	Expenditure incurred.	
1	2	3	4	5	6	7
						Central
		Rs.		Mls.	Rs.	Rs.
Total, Central Circle.	Head-quarter houses	7,840	Birdle-path	20-1-2 0	2,558	..
	Rest-houses	20,685	Cart-road	39-6-3-3	6,261	..
	Houses for subordinates ..	10,633	Inspection paths	50-9-19-1½	1,225	..
	Others	2,262	....	..	..	..
	Total ..	41,320	Total ..	111-0-24-4½	10,044	51,364
			A VII (*a*)	..	..	3,435
			Sinking wells	..	2,852	
			Digging trial wells	..	193	
			Constructing dams	..	50	
			Fencing	..	249	
			Others	..	91	
	Total, Central Circle ..	41,320	Total ..	111-0-24-4½	13,479	54,799
						Southern
Vellore, North.	Head-quarter houses	1,798	Ghat-road	¼	148	4,586
	Rest-houses	138	Cart-road	6	1,309	..
	Houses for subordinate establishments	1,258				
	Others	16				
	Deduct as per Accountant-General's audited figure.	— 81				
	Total, Vellore North ..	3,129	Total ..	6¼	1,457	4,586
Vellore, South.	Rest-houses	5,533	Bridle-path	3	58	6,026
	Others	15	Cart-road	13	399	..
			Others	..	21	..
	Total, Vellore South ..	5,548	Total ..	16	478	6,026
South Arcot ..	Rest-houses	764	....	..	..	1,903
	Houses for subordinate establishments	1,142				
		1,906				
	Deduct cash recovery ..	— 3				
	Total, South Arcot ..	1,903	Total ..	..	..	1,903
Salem, North ..	Rest-houses	8,736	Bridle-path	1½	226	10,535
	Houses for subordinate establishments	470	Cart-roads	21½	* 639	..
	Others	251	Others	..	213	..
	Total, Salem North ..	9,457	Total ..	23	1,078	10,535

* Includes cost of preliminary tracing of 18 miles.

and Buildings—*cont.*

Repairs executed during the year.					
Buildings.		Roads and paths.			Total expended on repairs.
Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired.	Expenditure incurred.	
8	9	10	11	12	13
Circle—cont.					
	RS.		MLS.	RS.	RS.
Head-quarter houses	789	Bridle-path	13	179	..
Rest-houses	2,658	Cart-road	64	3,663	..
Houses for subordinates	1,065	Ghat-road	..	54	..
Others	741	Others	..	14	..
Cost of establishment	5,443	Cost of establishments	..	336	..
Variations as per Accountant-General's audited figures	— 200	Deduct variations as per Accountant-General's audited figures.	..	19	..
Total ..	10,496	Total ..	77	4,227	14,723
		Add A-VII (*c*) ..	..	..	..
....	..	Repairing wells	..	204	462
....	..	Do. salt creek	..	50	
....	..	Removing silt	..	106	
....	..	Others	..	149	
....	..	Deduct as per Accountant-General's audited figures.	..	— 47	
Total ..	10,496	Total ..	77	4,689	15,185
Circle.					
Head-quarter houses	136	Bridle-paths	$3\frac{1}{2}$	145	5,169
Rest-houses	1,226	Ghat-road	$2\frac{1}{4}$	200	..
Houses for subordinate establishments	120	Cart-road	46	2,229	..
Other works	473	Others	..	16	..
	1,955	Deduct as per Accountant-General's audited figure	..	— 30	..
Add pay of establishment ..	654	Add A-VII (*c*) ..	..	..	321
		Deduct as per Accountant-General's audited figure	..	..	— 34
Total ..	2,609	Total ..	$51\frac{3}{4}$	2,560	5,456
Head-quarter houses	109	Ghat-road	5	3,574	6,040
Rest-houses	544	Cart-road	$22\frac{3}{4}$	1,242	..
Houses for subordinate establishments	10	Add A-VII (*c*) ..	..	..	483
Others	22				
	685				
Add pay of establishments ..	548				
	1,233				
Deduct cash recovery	9				
Total ..	1,224	Total ..	$27\frac{3}{4}$	4,816	6,523
Head-quarter houses	27		..	..	539
Rest-houses	23				
Houses for subordinate establishments	38	Add A-VII (*c*) ..	..	..	111
	88				
Add pay of establishment ..	542				
	630				
Deduct cash recovery	91				
Total ..	539	Total ..	..	..	650
Head-quarter houses	235	Cart-road	121	3,259	4,982
Rest-houses	1,223	Add as per Accountant-General's audited figure	..	8	..
Others	44	Add A-VIII (*c*) ..	..	..	686
	1,502	Deduct as per Accountant-General's audited figure	..	..	— 24
Add pay of establishment	213				
Total ..	1,715	Total ..	121	3,267	5,644

Communications

District.	New work undertaken during the year.					
	Buildings.		Roads and paths.			Total expenditure on new work.
	Description of building.	Expenditure incurred.	Road or path and object of the same.	Length of road or path.	Expenditure incurred.	
1	2	3	4	5	6	7
						Southern
		Rs.		Mls.	Rs.	Rs.
Salem, South..	Head-quarter houses	1,309	Bridle-path	23	* 3,822	12,776
	Rest-houses	5,001	Cart-road	23½	† 194	..
	Houses for subordinate establishments	2,420				
	Others	30				
	Total, Salem South ..	8,760	Total ..	46½	4,016	12,776
Trichinopoly.	Rest-houses	2,737	....	..	..	2,829
	Houses for subordinate establishments	68				
	Others	24				
	Total, Trichinopoly ..	2,829	Total ..	..	..	2,829
Madura ..	Rest-houses	3,320	Bridle-path	7	815	13,646
	Houses for subordinate establishments	6,503	Cart-road	8	2,860	..
			Others	..	148	..
	Total, Madura ..	9,823	Total ..	15	3,823	13,646
Tinnevelly ..	Head-quarter houses	136	Bridle-path	5⅝	978	5,063
	Rest-houses	635	Bridge	..	202	..
	Houses for subordinate establishments	2,837	Cart-road	¼	256	..
			Others	..	19	..
	Total, Tinnevelly ..	3,608	Total ..	5⅞	1,455	5,063
Total, Southern Circle.	Head-quarter houses	3,243	Ghat-road	½	148	57,364
	Rest-houses	26,864	Bridle-path	40⅛	5,899	..
	Houses for subordinate establishments	14,698	Cart-road	72¼	5,657	..
	Others	336	Bridge	..	202	..
			Others	..	401	..
		45,141				
	Deduct cash recovery ..	— 3				
		45,138				
	Deduct as per Accountant-General's audited figure.	— 81				
	Total, Southern Circle ..	45,057	Total ..	112⅝	12,307	57,364
						Western
South Canara..	....	..	(*a*) Cart roads	9	2,399	..
			(*e*) Others	5	347	..
	Total, South Canara ..	..	Total ..	14	2,746	2,746

* Includes cost of preliminary tracing of 11½ miles.

† Cost of preliminary tracing.

and Buildings—*cont.*

Repairs executed during the year.					
Buildings.		Roads and paths.			Total expended on repairs.
Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired	Expenditure incurred.	
8	9	10	11	12	13
Circle—cont.					
	RS.		MLS.	RS.	RS.
Head-quarter houses	26	Bridle-paths	½	66	977
Rest-houses	14	Cart-roads	8	258	..
Others	65				
	105	Add A-VII (*c*) ..	..	..	624
Add pay of establishment	548				
Total ..	653	Total ..	8½	324	1,601
Head-quarter houses	88	Ghat-road	7	395	5,748
Rest-houses	1,270	Bridle-path	38½	1,253	..
Others	97	Cart-road	79⅜	2,081	..
	1,455	....	..	3,729	5,748
Add pay of establishment	925	Deduct cash recovery of service payment	..	— 356	..
	2,380	Add A-VII (*c*) ..	..	..	364
Deduct cash recovery of service payments	— 5				
Total ..	2,375	Total ..	124⅞	3,373	6,112
Head-quarter houses	52	Cart-road	76¼	6,922	9,174
Rest-houses	582				
Houses for subordinate establishments	490	Others	..	24	..
Others	9	Add A-VII (*c*) ..	..	..	576
	1,133	Add as per Accountant-General's audited figure	..	..	5
Add pay of establishment	1,095				
Total ..	2,228	Total ..	76¼	6,946	9,755
Head-quarter houses	180	Ghat-road	3	753	3,293
Rest-houses	475	Bridge	..	37	..
Houses for subordinate establishments	364	Bridle-path	27⅛	447	..
Others	223	Cart-road	29⅜	804	..
		Others	..	10	..
		Add A-VII (*c*) ..	..	..	676
Total ..	1,242	Total ..	59½	2,051	3,969
Head-quarter houses	853	Ghat-road	17¼	4,922	..
Rest-houses	5,357	Bridle-path	69⅜	1,911	..
Houses for subordinate establishments	1,022	Bridge	..	37	..
Others	933	Cart-road	382¾	16,795	..
		Others	..	50	..
	8,165	....	469⅝	23,715	..
Add pay of establishments ..	4,525	Deduct cash recovery of service payment	..	— 356	..
	12,690		469⅝	23,359	35,922
Deduct cash recovery	— 105	Deduct as per Accountant-General's audited figure	..	— 22	
		Add A-VII (*c*) ..	..	..	3,841
		Deduct as per Accountant-General's audited figure	..	..	— 53
Total ..	12,585	Total ..	469⅝	23,337	39,710
Circle.					
Head-quarter houses	185	Cart-roads	6	147	1,221
Rest-houses	67	Others	9	170	
Houses for subordinate establishments.	138		..	..	..
Others	160	....	..	..	..
Add pay of watchers	356		..	..	..
Deduct cash recovery of service payments.	—2	Add A-VII (*c*) ..	..	..	608
Total ..	904	Total ..	15	317	1,829

District.	New work undertaken during the year.					
	Buildings.		Roads and paths.			Total expenditure on new work.
	Description of building.	Expenditure incurred.	Road or path and object of the same.	Length of road or path.	Expenditure incurred	
1	2	3	4	5	6	7
						Western
		RS.		MLS.	RS.	RS.
Malabar, North.	Rest-houses	1,715	Cart roads	11	238	..
	Houses for subordinate establishments.	1,600	Bridle-paths	..	12	..
			Bridges	..	2,310	..
	Others	147	Others	1	285	..
	Total, North Malabar ..	3,462	Total ..	12	2,845	6,307
Malabar, South.	Head-quarter houses	172	Cart roads	..	5	..
	Rest-houses	716	Bridle-paths	10	126	..
	Houses for subordinate establishments.	867	Bridges	..	28	..
	Others	70				
	Total, South Malabar ..	1,825	Total ..	10	159	1,984
The Nilgiris ..	Rest-houses	3,891	Cart roads	..	11	..
	Houses for subordinate establishments.	1,772	Bridle-paths	13	1,108	..
	Others	227				
	Total, The Nilgiris ..	5,890	Total ..	13	1,119	7,009
Kollegal ..	Head-quarter houses .. .	1,328	Cart roads	3	2,422	..
	Rest-houses	5,219	Ghat roads	1	71	..
	Houses for subordinate establishments.	504				
	Total, Kollegal ..	7,051	Total ..	4	2,493	9,544
Coimbatore, North.	Head-quarter houses	982	Cart roads	12	1,552	..
	Rest-houses	2,939	Ghat roads	5	2,230	..
	Houses for subordinate establishments.	3,629				
	Others	756				
	Total, Coimbatore, North ..	8,306	Total ..	17	3,782	12,088
Coimbatore, Central.	Head-quarter houses	1,667	Cart roads	6	920	..
	Rest-houses	4,958	Bridle-paths	..	14	..
	Houses for subordinate establishments.	528				
	Others	40				
	Total, Coimbatore, Central ..	7,193	Total ..	6	934	8,127

and Buildings—*cont.*

Repairs executed during the year.					
Buildings.		Roads and paths.			Total expended on repairs.
Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired.	Expenditure incurred.	
8	9	10	11	12	13
Circle—cont.					
	Rs.		Mls.	Rs.	Rs.
Head-quarter houses	172	Cart roads	105	3,778	6,420
Rest-houses	513	Bridle-paths	18	317	
Houses for subordinate establishments.	712	Bridges	..	271	
Others	262	Others	1	56	
Add pay of watchers, etc.	339	Add A-VII (*o*) ..	..	..	1,770 *—1
Total ..	1,998	Total ..	124	4,422	8,189
Head-quarter houses	506	Cart roads	21	3,170	4,444
Rest-houses	133	Bridle-paths	65	183	
Houses for subordinate establishments.	318	....	..	..	..
Others	32		..	..	..
Add pay of watchers	102		..	..	..
		Add A-VII (*o*) ..	..	..	201
Total ..	1,091	Total ..	86	3,353	4,645
Rest-houses	587	Cart roads	50	4,150	5,894
Houses for subordinate establishments.	1,014	Bridle-paths	3	30	
Others	113				
		Add A-VII (*o*) ..	..	..	2,377
Total ..	1,714	Total ..	53	4,180	8,271
Head-quarter houses	42	Cart roads	55	5,666	7,295
Rest-houses	613	Ghat roads	2	237	
Houses for subordinate establishments.	251			* +1	
Others	50		..	..	..
Add pay of watchers	435	Add A-VII (*o*) ..	..	..	2,311
Total ..	1,391	Total ..	57	5,904	9,606
Rest-houses	349	Cart roads	41	1,463	7,633
Houses for subordinate establishments.	67	Ghat roads	49	5,094	
Others	45			* —1	
Add pay of watchers	616		..	..	..
			..	..	..
		Add A-VII (*o*) ..	..	..	759
Total ..	1,077	Total ..	90	6,556	8,392
Head-quarter houses	103	Cart roads	23	2,708	3,744
Rest-houses	458	....	..	..	..
Houses for subordinate establishments.	269		..	..	..
Others	198		..	..	..
Add pay of watchers	8		..	..	..
		Add A-VII (*o*) ..	..	.	273
Total ..	1,036	Total ..	23	2,708	4,017

* Added or deducted as per Accountant-General's audited figures.

Communications

District.	New work undertaken during the year.					
	Buildings.		Roads and paths.			Total expenditure on new work.
	Description of building.	Expenditure incurred.	Road or path and object of the same.	Length of road or path.	Expenditure incurred.	
1	2	3	4	5	6	7
						Western
		RS.		MLS.	RS.	RS.
Coimbatore, South.	Rest-houses	20	Cart roads	1	240	..
	Houses for subordinate establishments.	1,896	Ghat roads	1	1,308	..
	Others	295				
	Total ..	2,211	Total ..	2	1,548	3,759
Direction ..	....	..	....	..	..	..
Total, Western Circle.	Head-quarter houses	4,149	Cart roads	42	7,787	..
	Rest-houses	19,458	Bridle-paths	23	1,260	..
	Houses for subordinate establishments.	10,796	Ghat roads	7	3,609	..
			Bridges	..	2,338	..
	Others	1,535	Others	6	632	..
	Total, Western Circle ..	35,938	Total ..	78	15,626	51,564
Total, Presidency.	Head-quarter houses	15,232	Cart roads	335½	43,219	2,14,776
	Rest-houses	72,113	Bridle-paths	88	9,753	
	Houses for subordinate establishments.	55,765	Ghat roads	7¼	3,757	
			Bridges	..	2,792	
	Others	9,971	Others	6	1,033	
			Inspection-paths	51	1,225	
	Total ..	1,53,081	Total ..	487¾	61,779	2,14,776
	Deduct cash recoveries	3	Add as per Accountant-General's figures.	..	..	219
	Deduct as per Accountant-General's audited figures.	81				
	Grand total, Presidency ..	1,52,997	Total ..	488	61,779	2,14,995

and Buildings—*cont.*

Repairs executed during the year.					
Buildings.		Roads and paths.			Total expended on repairs.
Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired.	Expenditure incurred.	
8	9	10	11	12	13
Circle—cont.					
	RS.		MLS.	RS.	RS.
Head-quarter houses	174	Cart-roads	18	2,112	
		Bridle-paths	2	9	
Rest-houses	1,265	Ghat-roads	4	421	
Houses for subordinate establishments.	1,014	Bridges	..	440	6,621
		Others	..	248	
Others	190	Add pay of temporary establishment ..	..	304	
Add pay of watchers	443		..	* +1	
		Add A-VII (*c*) ..	..	..	197
Total ..	3,086	Total ..	24	3,585	6,818
Others	313	....	..	..	313
Head-quarter houses	1,182	Cart-roads	319	23,194	
Rest-houses	3,985	Bridle-paths	88	539	
Houses for subordinate establishments.	3,783	Ghat-roads	55	5,752	
		Bridges	..	711	
Others	1,363	Others	10	474	43,585
Add pay of watchers	2,299	Add pay of temporary establishment ..	..	304	
Deduct cash recovery of service payments.	— 2				
		....	..	* +1	
		Add A-VII (*c*) ..	..	..	8,495
Total ..	12,610	Total ..	472	30,975	52,080
Head-quarter houses	2,824	Cart-roads	857¾	51,885	
Rest-houses	15,787	Bridle-paths	172¼	2,679	
Houses for subordinate establishments.	7,062	Ghat-roads	104⅔	13,777	1,24,888
		Bridges	..	748	
Others	8,668	Others	10	538	
Total .	34,341	Total ..	1,144⅔	69,627	..
Add pay of establishments	20,123	Add pay of establishment	..	1,139	..
Total ..	54,464	Total ..	1,144⅔	70,766	1,24,888
Deduct as per Accountant-General's figures.	342	Deduct cash recoveries	..	..	356
		,, as per Accountant-General's figures.	..	..	5
Total ..	54,122	Total ..	1,144	70,766	1,24,527
		Add A-VII (*c*) ..	..	..	21,785
Total ..	..	Total ..	1,144	70,766	1,46,312

* Added or deducted as per Accountant-General's audited figures.

ANNUAL

Forest Department,

REGISTER of Breaches of

District.		Cases pending from 1911-12.	New cases of the year.					Total cases.
			Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	
1		2	3	4	5	6	7	8
								NORTHERN
								Reserved
Ganjām	A	22	2	63	20	2	87	109
	B	140	1	335	53	11	400	540
	C	..	92	31	..	..	123	..
	Total ..	(a) 162	(b) 95	(c) 429	(d) 73	(e) 13	(f) 610	(g) 649
Vizagapatam ..	A	80	1	91	18	15	125	205
	B	49	1	209	39	11	260	309
	C	..	..	3	..	..	3	..
	Total ..	129	2	303	57	26	388	514
Gōdāvari, Upper.	A	5	1	1	..	..	2	7
	B	7	1	28	1	..	30	37
	C	..	18	..	..	..	18	..
	Total ..	12	20	29	1	.. ..	50	44
Gōdāvari, Lower.	A	46	2	43	16	..	61	107
	B	79	..	213	32	17	262	341
	C	..	..	..	..	..	..	..
	Total ..	125	2	256	48	17	323	448
Kistna	A	20	..	39	28	3	70	90
	B	61	..	149	197	14	360	421
	C	..	..	15	..	1	16	..
	Total ..	81	..	203	225	18	446	511
Kurnool East ..	A	8	1	10	25	10	46	54
	B	20	..	36	76	42	154	174
	C	..	..	1	2	1	4	..
	Total ..	28	1	47	103	53	204	228
Do. South..	A	37	..	86	52	7	145	182
	B	20	..	193	96	16	305	325
	C	..	..	18	..	1	19	..
	Total ..	57	..	297	148	24	469	507
Do. West ..	A	89	1	183	27	12	223	312
	B	57	1	135	117	8	261	318
	C	..	29	24	4	..	57	..
	Total ..	146	31	342	148	20	541	630

A = Cases taken to Court.
B = Case compounded by District Forest officer or Revenue Divisional officer
C = Cases undetected.
(a) Excludes 67 cases belonging to the Parlakimedi maliahs.
(b) Do. 9 do. do.
(c) Do. 160 do. do.
(d) Do. 17 do. do.
(e) Do. 32 do. do.
(f) Do. 218 do. do.
(g) Do. 285 do. do.

FORM No. 71.

Madras Presidency.

Forest Rules during 1912–13.

Disposed of during the year.						Cases pending at close of the year.
Convictions.		Acquittals.		Total.		
Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
9	10	11	12	13	14	15
CIRCLE.						
Forests.						
82	258	5	17	87	275	22
412	1,425	..	..	412	1,425	57
..	..	..	..	* 71	231	
				..	..	..
(a) 494	(b) 1,683	(c) 5	(d) 17	499	(f) 1,700	(g) 79
				(e) * 71	231	
161	572	31	145	192	717	13
246	541	..	..	246	541	52
..	..	..	..	* 11	23	
				..	..	..
407	1,113	31	145	438	1,258	65
				* 11	23	
4	10	2	22	6	32	1
29	51	..	..	29	51	5
..	..	..	..	* 3	10	
					..	..
33	61	2	22	35	83	6
				* 3	10	
79	190	6	34	85	224	21
254	660	..	..	* 1	..	
..	..	..	..	254	660	68
..	..	..	..	* 19	115	
				..	..	..
333	850	6	34	339	884	89
				* 20	115	
72	200	1	1	73	201	17
313	868	..	..	313	868	62
..	..	..	..	* 46	157	
				..	..	..
385	1,068	1	1	386	1,069	79
				* 46	157	
41	115	2	2	43	117	11
128	285	..	..	128	285	24
..	..	..	..	* 22	88	
				..	..	
169	400	2	2	171	402	35
				* 22	88	
138	296	25	59	163	355	19
227	486	..	..	227	486	49
..	..	..	..	* 49	176	
				..	..	..
365	782	25	59	390	841	68
				* 49	176	
249	671	15	63	264	754	48
223	617	..	..	223	617	52
..	..	..	..	* 43	113	
				..	..	..
472	1,288	15	63	487	1,351	100
				* 43	113	

* Withdrawn under the orders of the District Forest or Revenue Divisional officer.

(a) Excludes 178 cases belonging to the Parlakimedi maliahs.

(b) Excludes 486 persons involved in the 178 cases in the Parlakimedi maliahs.

(c) Excludes 33 cases belonging to the Parlakimedi maliahs.

(d) Excludes 104 persons involved in the 33 cases belonging to the Parlakimedi maliahs.

(e) Excludes 219 cases belonging to the Parlakimedi maliahs.

(f) Excludes 590 persons involved in the 219 cases belonging to the Parlakimedi maliahs.

(g) Excludes 66 cases belonging to the Parlakimedi maliahs.

Register of Breaches of

District.		Cases pending from 1911-12.	New cases of the year.					Total cases.
			Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	
1		2	3	4	5	6	7	8
								NORTHERN
								Reserved
Total for reserved forests,	A	307	8	516	186	49	759	1,066
	B	(a) 433	4	1,298	611	119	2,032	2,465
	C	..	139	92	6	3	240	..
	Total ..	740	151	1,906	803	171	3,031	3,531
								Unreserved
Ganjām	A	2	..	31	..	..	31	33
	B	29	..	130	..	..	130	159
	C	..	..	34	..	..	34	..
	Total ..	31	..	195	..	..	195	192
Vizagapatam ..	A	.	..	6	..	..	6	6
	B	..	..	14	..	..	14	14
	C .. .	..	..	..	..	..	..	..
	Total ..	..	..	20	..	..	20	20
Gōdāvari, Upper.	A	9	..	..	..	..	..	9
	B	8	..	11	..	..	11	19
	C	..	..	..	..	..	..	..
	Total ..	17	..	11	..	..	11	28
Do. Lower.	A	2	..	4	..	..	4	6
	B	16	..	51	..	..	51	67
	C	..	..	..	..	..	..	..
	Total ..	18	..	55	..	..	55	73
Kistna	A	1	..	..	..	..	..	1
	B	9	2	79	..	1	82	91
	C	..	1	24	..	..	25	..
	Total ..	10	3	103	..	1	107	92
Kurnool, East ..	A	..	..	1	..	..	1	1
	B	..	..	83	..	..	83	83
	C		..	3	..	..	3	..
	Total ..	..	..	87	..	..	87	84
Do. South ..	A	..	..	6	..	..	6	6
	B	..	..	103	..	..	103	103
	C	..	..	7	..	..	7	..
	Total ..	..	..	116	..	..	116	109
Do. West ..	A	..	..	7	..	1	8	8
	B	..	..	39	..	2	41	41
	C	..	..	8	..	..	8	..
	Total ..	..	..	54	..	3	57	49

A = Cases taken to Court.
B = Case compounded by District Forest officer or Revenue Divisional officer.
C = Cases undetected.
(a) Corrected in the Board's office.

Forest Rules during 1912-13—*cont.*

Disposed of during the year.						Cases pending at close of the year.
Convictions.		Acquittals.		Total.		
Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
9	10	11	12	13	14	15
CIRCLE—*cont.*						
Forests—cont.						
826	2,312	87	343	913	2,655	152
				* 1	..	
1,832	4,933	..	..	1,832	4,933	369
				* 264	913	
..	..	..	..	..	..	..
2,658	7,245	87	343	2,745	7,588	521
				* 265	913	
Lands.						
24	70	2	15	26	85	7
115	280	..	..	115	280	12
				* 32	87	
..	..	..	..	..	..	..
139	350	2	15	141	365	19
				* 32	87	
6	6	..	..	6	6	..
8	8	..	..	8	8	6
..	..	..	..	..	..	..
14	14	..	..	14	14	6
4	6	3	6	7	12	..
				* 2	5	
8	10	1	4	9	14	3
				* 7	9	
..	..	..	..	..	..	..
12	16	4	10	16	26	3
				* 9	14	
2	2	1	1	3	3	3
58	58	..	..	58	58	9
..	..	..	..	..	..	..
60	60	1	1	61	61	12
1	1	..	..	1	1	..
59	106	..	..	59	106	20
				* 12	23	
..	..	..	..	..	..	..
60	107	..	..	60	107	20
				* 12	23	
1	3	..	..	1	3	..
83	154	..	..	83	154	..
..	..	..	..	..	..	..
84	157	..	..	84	157	..
6	14	..	..	6	14	..
102	192	..	..	102	192	..
				* 1	2	
..	..	..	..	..	..	..
108	206	..	..	108	206	..
				* 1	2	
7	16	..	..	7	16	1
37	93	..	..	37	93	3
				* 1	6	
..	..	..	..	..	..	..
44	109	..	..	44	109	4
				* 1	6	

* Withdrawn under the orders of the District Forest or Revenue Divisional officer

Register of Breaches of Forest

District.		Cases pending from 1911–12.	New cases of the year.					Total cases.
			Injury to forests by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	
1		2	3	4	5	6	7	8
								NORTHERN
								Unreserved
Total for unreserved lands.	A	14	..	55	..	1	56	70
	B	62	2	510	.	3	515	577
	C	..	1	76	..	..	77	..
	Total ..	76	3	641	..	4	648	647
Total for reserved forests and unreserved lands.	A	321	8	571	186	50	815	1,136
	B	495	6	1,808	611	122	2,547	3,042
	C	..	140	168	6	3	317	..
	Grand Total ..	816	154	2,547	803	175	3,679	4,178
								CENTRAL
								Reserved
Bellary	A	† 79	2	61	79	17	159	238
	B	† 120	1	282	405	20	708	828
	C	..	33	1	12	..	46	..
	Total ..	199	36	344	496	37	913	1,066
Anantapur ..	A	50	.	139	110	15	264	314
	B	..	..	169	137	6	312	312
	C	..	164	15	109	1	289	..
	Total ..	50	164	323	356	22	865	626
Guntūr	A	27	..	105	164	5	274	301
	B	231	..	490	705	19	1,214	1,445
	C	..	..	..	..	..	..	..
	Total ..	258	..	595	869	24	1,488	1,746
Cuddapah, North ..	A	36	2	91	58	3	154	190
	B	32	1	165	90	9	265	297
	C	..	..	6	..	..	6	..
	Total ..	68	3	262	148	12	425	487
Cuddapah, East..	A	† 22	6	68	24	3	101	123
	B	† 75	1	405	176	7	589	664
	C	..	..	5	..	..	5	..
	Total ..	‡ 97	7	478	200	10	695	787
Nellore	A ..	106	1	161	205	17	384	490
	B	249	1	285	549	14	849	1,098
	C	..	23	2	1	..	26	..
	Total ..	(*a*) 355	25	448	755	31	1,259	1,588
Chingleput ..	A	3	..	75	35	1	111	114
	B	142	..	585	369	12	966	1,108
	C	..	2	..	..	..	2	..
	Total ..	145	2	660	404	13	1,079	1,222

A = Cases taken into Court.
B = Cases compounded by District Forest officer or Revenue Divisional officers.
C = Cases undetected.
† The variations between the closing balance of 1911–12 and the opening balance of 1912–13 are due to transfers between A and B.
‡ The difference of 1 is due to the inclusion of an undetected case in the last year's closing balance.
(*a*) Revised figure.

Rules during 1912–13—*cont.*

Disposed of during the year.						Cases pending at close of the year.
Convictions.		Acquittals.		Total.		
Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
9	10	11	12	13	14	15
CIRCLE—*cont.*						
Lands—cont.						
51	118	6	22	57	140	11
				* 2	5	
470	901	1	4	471	905	53
				* 53	127	
..	..	..	..	..	..	..
521	1,019	7	26	528	1,045	64
				* 55	132	
877	2,430	93	365	970	2,795	163
				* 3	5	
2,302	5,834	1	4	2,303	5,838	422
				* 317	1,040	
..	..	..	..	..	..	..
3,179	8,264	94	369	3,273	8,633	585
				* 320	1,045	
CIRCLE.						
Forests.						
207	577	20	141	227	718	11
615	1,805	..	..	615	1,805	129
..	..	..	..	* 84	217	..
822	2,382	20	141	842	2,522	140
				* 84	217	
139	391	97	383	236	774	78
312	758	..	..	312	758	..
..	..	..	..	..	..	..
451	1,149	97	383	548	1,532	78
257	824	23	175	280	999	21
1,057	3,406	..	..	1,057	3,406	332
..	..	..	..	* 56	212	..
1,314	4,230	23	175	1,337	4,405	353
				* 56	212	
129	467	21	107	150	574	33
				* 7	13	
264	673	..	..	264	673	16
..	..	..	..	* 17	34	..
393	1,140	21	107	414	1,247	49
				* 24	47	
103	264	3	13	106	277	17
493	1,135	..	..	493	1,135	123
..	..	..	..	* 48	103	..
596	1,399	3	13	599	1,412	140
				* 48	103	
403	955	52	193	455	1,148	35
830	1,754	..	..	830	1,754	142
..	..	..	..	* 126	331	..
1,233	2,709	52	193	1,285	2,902	177
				* 126	331	
108	198	1	1	109	199	5
798	1,553	..	..	798	1,553	251
..	..	..	..	* 59	171	..
906	1,751	1	1	907	1,752	256
				* 59	171	

* Cases withdrawn under the orders of the District Forest Officer or Revenue Divisional officer.

Register of Breaches of Forest-

District.		Cases pending from 1911-12.	New cases of the year.					Total cases.
			Injury to forests by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	
1		2	3	4	5	6	7	8
								CENTRAL
								Reserved
Chittoor	A	† 93	..	122	91	18	231	324
	B	† 184	..	531	403	73	1,007	1,191
	C	..	45	..	..	..	45	..
	Total ..	277	45	653	494	91	1,283	1,515
Total for reserved forests	A	416	11	822	766	79	1,678	2,094
	B	1,033	4	2,912	2,834	160	5,910	6,943
	C	..	267	29	122	1	419	..
	Total ..	1,449	282	3,763	3,722	240	8,007	9,037
								Unreserved
Bellary	A	5	..	81	..	3	84	89
	B	9	..	263	..	6	269	278
	C	..	..	27	..	..	27	..
	Total ..	14	..	371	..	9	380	367
Anantapur ..	A	19	..	117	..	..	117	136
	B	..	..	165	..	2	167	167
	C	..	..	24	..	..	24	..
	Total ..	19	..	306	..	2	308	303
Guntur	A	4	..	25	..	..	25	29
	B	37	1	365	..	7	373	410
	C	..	..	..	..	..	..	..
	Total ..	41	1	390	..	7	398	439
Cuddapah, North ..	A	..	..	..	..	..	..	..
	B	..	..	55	..	..	55	55
	C	..	..	..	..	..	..	..
	Total ..	..	..	55	..	..	55	55
Cuddapah, East	A	..	..	..	..	..	..	..
	B	..	..	24	..	..	24	24
	C	..	..	4	..	..	4	..
	Total ..	..	..	28	..	..	28	24
Nellore	A	24	..	22	..	..	22	46
	B	40	..	306	..	..	306	346
	C	..	..	92	..	..	92	
	Total ..	(a) 64	..	420	..	..	420	392
Chingleput ..	A	..	..	4	..	..	4	4
	B	..	..	155	..	14	169	169
	C	..	..	..	..	..	..	..
	Total ..	..	..	159	..	14	173	173
Chittoor	A	..	..	..	..	..	..	..
	B	..	..	69	..	..	69	69
	C	..	..	..	..	..	..	..
	Total ..	..	..	69	..	..	69	69

A = Cases taken into Court.
B = Case compounded by District Forest officer or Revenue Divisional officer.
C = Cases undetected.
† The variations between the closing balance of 1911-12 and the opening balance of 1912-13 are due to transfers between A and B.
(a) Revised figures.

Rules during 1912-13—*cont.*

Disposed of during the year.						Cases pending at close of the year.
Convictions.		Acquittals.		Total.		
Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
9	10	11	12	13	14	15
CIRCLE—*cont.*						
Forests—cont.						
260 1,034 ..	536 2,395 ..	30	66	290 1,034 * 83	602 2,395 145	34 74 ..
1,294	2,931	30	66	1,324 * 83	2,997 145	108
1,606 5,403 ..	4,212 13,479 ..	247	1,079	1,853 * 7 5,403 * 473	5,291 13 13,479 1,213	234 1,067 ..
7,009	17,691	247	1,079	7,256 * 480	18,770 1,226	1,301
Lands						
77 248 ..	95 429 ..	10	27	87 248 ..	122 429 ..	2 30 ..
325	524	10	27	335	551	32
43 167 ..	95 242 ..	29	57	72 167 ..	152 242 ..	64 .. ..
210	337	29	57	239	394	64
15 250 ..	49 738 ..	2	4	17 250 * 103	53 738 81	12 57 ..
265	787	2	4	267 * 103	791 81	69
.. 55 ..	.. 83 ..	.. .. ..	.. .. ..	.. 55 ..	.. 83 ..	.. .. ..
55	83	..	..	55	83	..
.. 24 ..	.. 35 ..	.. .. ..	.. .. ..	.. 24 ..	.. 35 ..	.. .. ..
24	35	..	..	24	35	..
28 284 ..	35 473 ..	12	30	40 284 ..	65 473 ..	6 62 ..
312	508	12	30	324	538	68
.. 153 ..	.. 232 ..	.. .. ..	.. .. ..	.. 153 * 13	.. 232 29	4 3 ..
153	232	..	..	153 * 13	232 29	7
.. 69 ..	.. 122 ..	.. .. ..	.. .. ..	.. 69 ..	.. 122 ..	.. .. ..
69	122	..	..	69	122	..

* Cases withdrawn under the orders of the District Forest officer or Revenue Divisional officer.

Register of Breaches of Forest

District.		Cases pending from 1911-12.	New cases of the year.					Total cases.
			Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	
1		2	3	4	5	6	7	8
								CENTRAL
								Unreserved
Total for unreserved lands.	A	52	..	249	..	3	252	304
	B	86	1	1,402	..	29	1,432	1,518
	C	..	..	147	..	..	147	..
	Total ..	138	1	1,798	..	32	1,831	1,822
Total for reserved forests and unreserved lands.	A	468	11	1,071	766	82	1,930	2,398
	B	1,119	5	4,314	2,834	189	7,342	8,461
	C	..	267	176	122	1	566	..
	Grand Total ..	1,587	283	5,561	3,722	272	9,838	10,859
								SOUTHERN
								Reserved
North Vellore.	A	90 (a) — 2	..	71	95	13	179	267
	B	213 (a) — 110	..	663	527	3	1,193	1,296
	C	..	33	..	..	..	33	..
	Total ..	303 (a) — 112	33	734	622	16	1,405	1,563
South Vellore.	A	62 (a) — 4 (b) + 53	2	143	23	17	185	296
	B	252 (a) — 43 (b) — 53	..	803	272	21	1,096	1,252
	C	..	24	1	..	..	25	..
	Total ..	314 — 47	26	947	295	38	1,306	1,548
South Arcot ..	A	240 (a) — 30 (b) — 56	..	351	148	17	516	670
	B	298 (a) — 215 (b) + 56	..	663	554	5	1,222	1,361
	C	..	7	22	..	..	29	..
	Total ..	538 — 245	7	1,036	702	22	1,767	2,031
North Salem ..	A	217	3	303	80	15	401	618
	B	149	..	676	186	23	885	1,034
	C	..	14	..	..	..	14	..
	Total ..	366	17	979	266	38	1,300	1,652
South Salem ..	A	81	..	254	30	7	291	372
	B	254	.	272	164	5	441	695
	C	..	48	15	..	..	63	..
	Total ..	335	48	541	194	12	795	1,067

A = Cases taken into Court.
B = Cases compounded by District Forest officer or Revenue Divisional officer
C = Cases undetected.
† In North Salem separate figures of numbers of persons have not been furnished for cases withdrawn under A and B.
(a) Transferred to unreserved lands.
(b) Transfers between A and B.

Rules during 1912-13—*cont.*

Disposed of during the year.						Cases pending at close of the year.
Convictions.		Acquittals.		Total.		
Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
9	10	11	12	13	14	15
CIRCLE—*cont*						
Lands—cont.						
163	274	53	118	216	392	88
1,250	2,354	..	..	1,250	2,354	152
..	..	..	..	* 116	110	..
1,413	2,628	53	118	1,466	2,746	240
				* 116	110	
1,769	4,486	300	1,197	2,069	5,683	322
				* 7	13	
6,653	15,833	..	..	6,653	15,833	1,219
..	..	..	..	* 589	1,323	..
8,422	20,319	300	1,197	8,722	21,516	1,541
				* 596	1,336	
CIRCLE.						
Forests.						
131	398	10	47	141	445	99
				* 27	67	
1,135	2,259	..	..	1,135	2,259	71
				* 90	73	
..	..	..	..	..	..	..
1,266	2,657	10	47	1,276	2,704	170
				117	140	
232	650	11	57	243	707	50
				* 3	4	
992	1,849	..	..	992	1,849	206
				* 54	146	
..	..	..	..	..	..	..
1,224	2,499	11	57	1,235	2,556	256
				57	150	
566	1,259	13	48	579	1,307	12
				* 79	212	
1,105	2,038	..	..	1,105	2,038	236
				* 20	60	
..	..	..	..	..	..	..
1,671	3,297	13	48	1,684	3,345	248
				99	272	
439	1,239	26	156	465	1,395	90
				* 63	† 229	
911	2,335	..	..	911	2,335	100
				* 23		
..	..	..	..	..	..	..
1,350	3,574	26	156	1,376	3,730	190
				86	229	
263	1,121	16	29	279	1,150	93
496	1,829	..	..	496	1,829	148
				* 51	94	
..	..	..	..	..	..	..
759	2,950	16	29	775	2,979	241
				51	94	

* Cases withdrawn under the orders of the District Forest officer or Revenue Divisional officer.

Register of Breaches of Forest

District.		Cases pending from 1911-12.	New cases of the year.					Total cases.
			Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	
1		2	3	4	5	6	7	8
								SOUTHERN
								Reserved
Trichinopoly.	A ..	22 (*b*) + 19	2	28	30	5	65	106
	B ..	452 (*a*) —128 (*b*) — 19	..	558	510	6	1,074	1,379
	C ..	..	5	24	42	6	77	..
	Total	474 — 128	7	610	582	17	1,216	1,485
Madura ..	A	47	2	55	55	18	130	177
	B	352	..	583	309	62	954	1,306
	C	..	76	..	..	..	76	..
	Total ..	399	78	638	364	80	1,160	1,483
Tinnevelly ..	A	17	3	20	11	16	50	67
	B ..	245 (*a*) — 113	..	251	240	14	505	637
	C	..	31	12	8	2	53	..
	Total ..	262 — 113	34	283	259	32	608	704
Total for reserved forest.	A ..	776 (*a*) — 36 (*b*) + 16	12	1,225	472	108	1,817	2,573
	B ..	2,215 (*a*) —609 (*b*) — 16	..	4,469	2,762	139	7,370	8,960
	C ..	..	238	74	50	8	370	..
	Total ..	2,991 — 645 or 2,346	250	5,768	3,284	255	9,557	11,533
								Unreserved
North Vellore.	A	2	..	20	..	..	20	22
	B	110	..	465	..	3	468	578
	C	..	..	..	..	..	..	..
	Total ..	112	..	485	..	3	488	600
South Vellore.	A	4	..	3	..	2	5	9
	B ..	43 (*c*) — 2	1	69	..	88	158	199
	C	..	..	..	..	..	..	..
	Total ..	47 — 2	1	72	..	90	163	208
South Arcot ..	A ..	30 (*b*) + 6	..	132	..	..	132	168
	B ..	215 (*b*) — 6	..	538	..	..	538	747
	C ..	..	3	39	..	..	42	..
	Total ..	245	3	709	..	..	712	915

A = Cases taken into Court.
B = Cases compounded by District Forest officer or Revenue Divisional officer.
C = Cases undetected.
(*a*) Transfered to unreserved lands.
(*b*) Transfer between A and B.
(*c*) Undetected cases erroneously shown as cases compounded in the previous return and now deducted.

Rules during 1912–13—*cont.*

Disposed of during the year.						Cases pending at close of the year.
Convictions.		Acquittals.		Total.		
Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
9	10	11	12	13	14	15
CIRCLE—*cont.*						
Forests—cont.						
57	168	33	105	90	273	16
1,114	2,447	..	..	1,114	2,447	251
				* 14	49	
..	..	..	..	..	..	..
1,171	2,615	33	105	1,204	2,720	267
				14	49	
131	496	25	210	156	706	21
805	2,540	..	..	805	2,540	403
				* 98	328	
..	..	..	..	..	..	..
936	3,036	25	210	961	3,246	424
				98	328	
44	182	9	35	53	217	14
562	1,554	..	..	562	1,554	59
				* 16	33	
..	..	..	..	..	..	..
606	1,736	9	35	615	1,771	73
				16	33	
1,863	5,513	143	687	2,006	6,200	395
				* 172	512	
7,120	16,851	..	..	7,120	16,851	1,474
				* 366	783	
..	..	..	..	..	..	..
8,988	22,864	143	687	9,126	23,051	1,869
				* 538	1,295	
Lands.						
19	33	3	7	22	40	..
402	544	..	..	402	544	162
				* 14	23	
..	..	..	..	..	..	..
421	577	3	7	424	584	162
				14	23	
7	15	2	3	9	18	..
142	238	..	..	142	238	54
				* 3	7	
..	..	..	..	..	..	..
149	253	2	3	151	256	54
				3	7	
87	127	8	9	95	136	46
				* 27	31	
532	756	..	..	532	756	212
				* 3	3	
..	..	..	..	..	..	..
619	883	8	9	627	892	258
				30	34	

* Cases withdrawn under the orders of the District Forest officer or Revenue Divisional officer.

Register of Breaches of Forest

District		Cases pending from 1911–12.	New cases of the year.					Total cases.
			Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	
1		2	3	4	5	6	7	8
								SOUTHERN *Unreserved*
North Salem ..	A	..	3	30	..	..	33	33
	B	..	..	..	..	..	..	..
	C	..	..	..	..	..	..	..
	Total ..	..	3	30	..	..	33	33
South Salem ..	A	..	..	..	..	..	..	..
	B	..	..	83	..	..	83	83
	C	..	..	..	..	..	..	..
	Total ..	..	..	83	..	..	83	83
Trichinopoly.	A	..	..	15	..	..	15	15
	B ..	128 (*a*) — 1	..	1,149	..	2	1,151	1,278
	C	..	..	..	..	..	..	..
	Total	128 — 1	..	1,164	..	2	1,166	1,293
Madura ..	A	..	..	..	..	..	..	..
	B	..	..	..	..	..	..	..
	C	..	..	..	..	..	..	..
	Total ..	..	..	..	..	..	..	..
Tinnevelly ..	A	..	..	34	..	2	36	36
	B ..	113 (*b*) + 3	..	267	..	18	285	401
	C	..	..	47	..	..	47	..
	Total ..	113 + 3	..	348	..	20	368	437
Total for unreserved land.	A ..	36 (*c*) + 6	3	234	..	4	241	283
	B ..	609 (*c*) — 6	1	2,571	..	111	2,683	3,286
	C ..	..	3	86	..	..	89	..
	Total ..	645	7	2,891	..	115	3,013	3,569
Total for reserved forests and unreserved lands.	A	798	15	1,459	472	112	2 058	2,856
	B	2,193	1	7,040	2,762	250	10,053	12,246
	C	..	241	160	50	8	459	..
	Grand Total ..	2,991	257	8,659	3,284	370	12,570	15,102
								WESTERN *Reserved*
South Canara	A	(*e*) 44	18	63	11	15	107	151
	B	(*e*) 179	43	860	141	40	1,084	1,263
	C	..	130	..	..	..	130	..
	Total ..	223	191	923	152	55	1,321	1,414
Malabar, North	A	3	1	1	8	3	13	16
	C	..	1	..	..	..	1	..
	Total ..	3	2	1	8	3	14	16

A = Cases taken into Court.
B = Cases compounded by District Forest officer or Revenue Divisional officer.
C = Cases undetected.
(*a*) Shown in excess in the previous return.
(*b*) Added as per correct figures now furnished by the Collector.
(*c*) Transfer between A and B.
(*d*) Complete figures not received; hence not included.
(*e*) The variations between the closing balance of 1911–12 and the figures are due to transfers between heads A and B.

Rules during 1912-13—*cont.*

Disposed of during the year.						Cases pending at close of the year.
Convictions.		Acquittals.		Total.		
Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
9	10	11	12	13	14	15
CIRCLE—*cont.*						
Lands—cont.						
24	37	7	11	31	48	2
..	..	..	..	..	..	..
..	..	..	..	..	..	..
24	37	7	11	31	48	2
..	..	..	..	..	..	..
83	113	..	..	83	113	..
..	..	..	..	..	..	..
83	113	..	..	83	113	..
15	20	..	..	15	20	..
1,112	1,294	..	..	1,112	1,294	166
..	..	..	..	..	..	..
1,127	1,314	..	..	1,127	1,314	166
..	..	..	..	..	..	..
..	..	..	..	..	..	..
..	..	..	..	..	..	(*d*) ..
..	..	..	..	..	..	..
28	50	5	14	33	64	3
113	220	..	..	113	220	59
..	..	..	..	* 229	283	..
141	270	5	14	146	284	62
				229	283	
180	282	25	44	205	326	51
				27	31	
2,384	3,165	..	..	2,384	3,165	653
				249	316	
..	..	..	..	..	..	..
2,564	3,447	25	44	2,589	3,491	704
				276	347	
2,043	5,795	168	731	2,211	6,526	446
				199	543	
9,504	20,016	..	..	9,504	20,016	2,127
				615	1,099	
..	..	..	..	..	..	..
11,547	25,811	168	731	11,715	26,542	2,573
				814	1,642	
CIRCLE.						
Forests.						
102	222	11	35	113	257	38
922	1,786	..	..	922	1,786	194
..	..	..	..	* 147	* 327	..
1,024	2,008	11	35	1,035	2,043	232
				* 147	* 327	
11	14	..	..	11	14	4
..	..	..	..	* 1	* 1	..
11	14	..	..	11	14	4
				* 1	* 1	

* Cases withdrawn under the orders of the District Forest officer or Revenue Divisional officer.

Register of Breaches of Forest

District.		Cases pending from 1911-12.	New cases of the year. Injury to forests by fire.	Un-authorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	Total cases.
1		2	3	4	5	6	7	8
								WESTERN
								Reserved
Malabar, South.	A	2	..	1	3	..	4	6
	B	1	..	2	8	..	10	11
	C	..	1	..	..	..	1	..
	Total	3	1	3	11	..	15	17
The Nilgiris	A	(a) 4	3	21	7	4	35	39
	B	(a) 7	3	53	34	18	108	115
	C	..	43	1	..	..	44	..
	Total	11	49	75	41	22	187	154
Kollegal	A	(a) 40	1	39	21	10	71	111
	B	(a) 56	..	90	97	9	196	252
	C	..	18	..	..	1	19	..
	Total	96	19	129	118	20	286	363
Coimbatore, North.	A	(a) 33	1	103	49	10	163	196
	B	(a) 27	1	172	180	30	383	410
	C	..	42	4	..	1	47	..
	Total	60	44	279	229	41	593	606
Coimbatore, Central.	A	16	5	58	22	10	95	111
	B	37	2	210	125	50	387	424
	C	..	24	..	..	..	24	..
	Total	53	31	268	147	60	506	535
Coimbatore, South.	A	8	..	63	38	21	122	130
	B	7	..	41	37	14	92	99
	C	..	41	8	1	..	50	..
	Total	15	41	112	76	35	264	229
Total for reserved forests.	A	150	29	349	159	73	610	760
	B	314	49	1,428	622	161	2,260	2,574
	C	..	300	13	1	2	316	..
	Total	464	378	1,790	782	236	3,186	3,334
								Unreserved
South Canara	A	(a) 10	..	33	..	2	35	45
	B	(a) 45	..	115	..	12	127	172
	Total	55	..	148	..	14	162	217

A = Cases taken into Court.
B = Cases compounded by District Forest Officer or Revenue Divisional officer.
C = Cases undetected.
(a) The variations between the closing balance of 1911-12 and these figures are due to transfers between heads A and B.
(b) Omitted to be shown in the last year's return by the Collector.

Rules during 1912–13—*cont.*

Disposed of during the year.						Cases pending at close of the year.
Convictions.		Acquittals.		Total.		
Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
9	10	11	12	13	14	15
CIRCLE—*cont.*						
Forests—cont.						
5	7	..	..	5	7	..
				* 1	* 1	
10	19	..	..	10	19	1
..	..	..	..	..	..	..
15	26	..	..	15	26	1
				* 1	* 1	
28	74	1	1	29	75	10
106	365	..	..	106	365	9
..	..	..	..	..	..	..
134	439	1	1	135	440	19
70	226	19	80	89	306	21
				* 1	* 2	
193	461	..	..	193	461	30
				* 29	* 111	
..	..	..	..	..	..	..
263	687	19	80	282	767	51
				* 30	* 113	
156	571	6	29	162	600	34
291	779	..	..	291	779	79
				* 40	* 125	
..	..	..	..	..	..	..
447	1,350	6	29	453	1,379	113
				* 40	* 125	
100	346	3	18	103	364	8
331	933	..	..	331	933	71
				* 22	* 78	
..	..	..	..	..	..	..
431	1,279	3	18	434	1,297	79
				* 22	* 78	
121	260	2	4	123	264	7
79	220	..	..	79	220	14
				* 6	* 14	
..	..	..	..	..	..	..
200	480	2	4	202	484	21
				* 6	* 14	
593	1,720	42	167	635	1,887	122
				* 3	* 2	
1,932	4,563	..	..	1,932	4,563	398
				* 244	* 655	
..	..	..	..	..	..	..
2,525	6,283	42	167	2,567	6,450	520
				* 247	* 657	
Lands.						
31	56	6	10	37	66	8
121	138	..	..	121	138	36
				* 15	* 38	
152	194	6	10	158	204	44
				* 15	* 38	

* Withdrawn under the orders of the District Forest Officer or Revenue Divisional officer.

Register of Breaches of Forest

District.		Cases pending from 1911-12.	New cases of the year.					Total cases.
			Injury to forests by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	
1		2	3	4	5	6	7	8
								WESTERN
								Unreserved
Malabar, North	B	..	..	3	..	..	3	3
Malabar, South	A	..	1	..	..	1	2	2
	B	3	..	2	..	..	2	5
	C	..	..	..	..	1	1	..
	Total ..	3	1	2	..	2	5	7
Kollegal ..	A	(*a*) 1	1	..	..	..	1	2
	B	(*a*) 5	2	15	..	..	17	22
	Total ..	6	3	15	..	..	18	24
Coimbatore, North.	A	..	..	9	..	..	9	9
	B	..	..	144	..	..	144	144
	C	..	1	1	..	..	2	..
	Total ..	..	1	154	..	..	155	153
Coimbatore, Central.	A	3	..	27	..	1	28	31
	B	(*b*) 8	..	170	..	..	170	178
	C	..	..	3	..	..	3	..
	Total ..	11	..	200	..	1	201	209
Coimbatore, South.	A	..	..	7	..	..	7	7
	B	..	..	65	..	..	65	65
	C	..	..	3	..	..	3	..
	Total ..	..	..	75	..	..	75	72
Total for unreserved lands.	A	14	2	76	..	4	82	96
	B	61	2	514	..	12	528	589
	C	..	1	7	..	1	9	..
	Total ..	75	5	597	..	17	619	685
Total for reserved forests and unreserved lands.	A	164	31	425	159	77	692	856
	B	375	51	1,942	622	173	2,788	3,163
	C	..	301	20	1	3	325	..
	Grand Total ..	539	383	2,387	782	253	3,805	4,019
Total, Presidency.	A	1,751	65	3,526	1,583	321	5,495	7,246
	B	4,182	63	15,104	6,829	734	22,730	26,912
	C	..	949	524	179	15	1,667	..
Grand Total, Presidency. ..		5,933	1,077	19,154	8,591	1,070	29,892	34,158

A = Cases taken into Court.
B = Cases compounded by District Forest officer or Revenue Divisional officer.
C = Cases undetected.
(*a*) The variations between the closing balance of 1911-12 and these figures are due to transfers between heads A and B.
(*b*) Omitted to be shown in the last year's return by the Collector.

Rules during 1912-13—*cont.*

Disposed of during the year.						Cases pending at close of the year.
Convictions.		Acquittals.		Total.		
Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
9	10	11	12	13	14	15
CIRCLE—*cont.*						
Lands—cont.						
3	3	..	..	3	3	..
..	..	1	2	1	2	..
				* 1	* 1	
5	11	..	..	5	11	..
..	..	..	..	..	..	..
5	11	1	2	6	13	..
				* 1	* 1	
1	1	..	..	1	1	1
17	24	..	..	17	24	5
18	25	..	..	18	25	6
6	17	2	8	8	25	1
143	312	..	..	143	312	1
..	..	..	..	..	..	..
149	329	2	8	151	337	2
25	49	4	10	29	59	2
166	285	..	..	166	285	7
				* 5	* 15	
..	..	..	..	..	..	..
191	334	4	10	195	344	9
				* 5	* 15	
7	17	..	..	7	17	..
64	84	..	..	64	84	..
				* 1	* 1	
..	..	..	..	..	..	..
71	101	..	..	71	101	..
				* 1	* 1	
70	140	13	30	83	170	12
				* 1	* 1	
519	857	..	..	519	857	49
				* 21	* 54	
..	..	..	..	..	..	..
589	997	13	30	602	1,027	61
				* 22	* 55	
663	1,860	55	197	718	2,057	134
				* 4	* 3	
2,451	5,420	..	..	2,451	5,420	447
				* 265	* 709	
..	..	..	..	..	..	..
3,114	7,280	55	197	3,169	7,477	581
				* 269	* 712	
5,352	14,671	616	2,490	5,968	17,061	1,065
				* 213	* 564	
20,910	47,103	1	4	20,911	47,107	4,215
				* 1,786	* 4,171	
..	..	..	..	..	..	..
26,262	61,674	617	2,494	26,879	64,168	5,280
				* 1,999	* 4,735	

* Withdrawn under the orders of the District Forest Officer or Revenue Divisional officer.

APPENDIX to Annual Form No. 71 (Statement No. II prescribed by the Government of India).

District.	Details of prosecution for offences by fire.						
	Serial number.	Area burnt in acres.	Character of offence (whether intentional or careless).	Whether acquitted or convicted.	Section of law under which convicted.	Amount of punishment.	Remarks.
NORTHERN CIRCLE.							
Ganjām ..	* 1	50 ..	Careless ..	Withdrawn.	....	....	
	* 2	50 ..	Do. ..	Do. ..	....	....	....
	* 3	10 ..	Do. ..	Do. ..	....	....	....
	* 4	2 ..	Do. ..	Do. ..	....	....	....
	5	10 ..	Intentional.	Pending ..	....	....	....
	6	50 ..	Do. ..	Withdrawn.	....	....	....
	7	45 ..	Do. ..	Pending ..	....	....	....
Vizagapatam.	1	..	Careless ..	Convicted ..	21 (*c*) of Madras Forest Act.	Sentenced to undergo one week's rigorous imprisonment for kindling fire in Burna reserve. No damages was done.	....
Gōdāvari, Upper.	1	5 ..	Careless ..	Withdrawn.	....	....	....
	2	3,200 ..	Intentional.	Pending ..	....	....	Under trial by the Magistrate.
Gōdāvari, Lower.	* 1	..	Intentional.	Acquitted ..	Section 21 of the Forest Act.	....	....
	2	..	..	Pending ..	....	....	Pending with the Sub-Magistrate, Prathipad.
	3	..	..	Convicted ..	....	Sentenced to pay a fine of Rs. 5 each, the accused being three in number.	....
Kurnool, East.	1	7	Careless ..	Pending ..	....	....	....
Kurnool, South.	* 1	A few square yards.	Careless ..	Convicted ..	....	The two accused were sentenced to pay a fine of Rs. 8 each in default to suffer rigorous imprisonment for a week. They are further ordered to pay a compensation of Rs. 2 each to the Forest department.	The case has since been disposed of with the result that two accused out of three were acquitted and the third was fined Rs. 10.
Kurnool, West.	1	..	Intentional.	Pending ..	....	....	....
	1	..	Careless ..	Withdrawn.	....	....	....
CENTRAL CIRCLE.							
Bellary ..	* 1	100 ..	Intentional.	Acquitted ..	Section 21 (*b*) of the Forest Act.	....	
	2	1 sq. chain.	Careless ..	Do. ..	Do.	....	
	3	9 acres ..	Intentional.	Compounded.	Do.	Compounded for Rs. 5.	
	4	70 acres ..	Do.	Pending ..	....	....	
Guntūr ..	* 1	4 sq. yds. ..	Careless ..	Convicted ..	Section 21 (*b*) of the Forest Act.	One accused sentenced to undergo simple imprisonment for 7 days and the other was fined Rs. 5 with the option of 10 days' simple imprisonment.	
	* 2	15 sq. yds ..	Intentional.	Do. ..	Do.	Fined Rs. 3 with the option of 6 days' simple imprisonment.	One case in unreserved land not reported.
Cuddapah, North.	1	1,570 ..	Do.	Pending ..	....	....	
	2	25 ..	Do.	Withdrawn.	....	....	
	3	580 ..	Do.	Pending ..	....	....	
	1	50 ..	Do.	Convicted ..	Section 21 (*b*) of the Forest Act.	Three months' rigorous imprisonment.	
	2	560 ..	Do.	Pending ..	....	....	
	3	½ chain ..	Do.	Convicted ..	Section 21 (*b*) of the Forest Act.	Fined Rs. 20 and in default to undergo 15 days' rigorous imprisonment.	
Cuddapah, East.	4	(*a*) ..	Do	Do. ..	Do.	Nos. 1 and 2 to two months' rigorous imprisonment and No. 3 to one month's rigorous imprisonment.	(*a*) Offences of merely kindling fire and no areas have been burnt.
	5	800 ..	Do.	Pending ..	....	....	
	6	(*a*) ..	Do.	Do. ..	....	....	
		400 ..	Do.	Withdrawn.	....	....	
Nellore ..	7	½ cent. ..	Careless ..	Compounded.	Sections 21 and 55 of Forest Act.	Compounded for Rs. 5.	
	12	1·80 sq. ft.	Do. ..	Pending ..	....	....	

* Pending cases of previous year.

Appendix to Annual Form No. 71 (Statement No. II prescribed by the Government of India)—*cont.*

District.	Details of punishment for offences by fire during 1912-13.						
	Serial number.	Area burnt in acres.	Character of offence whether intentional or careless.	Whether acquitted or convicted.	Section of law under which convicted.	Amount of punishment.	Remarks.
				Southern Circle.			
North Vellore.	1	2 cents ..	Careless ..	Convicted ..	Section 21 of the Forest Act.	Compounded for Rs. 18.	
	2	40 acres ..	Do. ..	Acquitted ..	Acquitted.	....	
South Vellore.	1	About 27 acres.	Intentional.	Convicted ..	Section 21 (*c*) of the Forest Act.	Rigorous imprisonment for one month.	
	2	18 acres ..	Do.	Acquitted ..	....	....	
	3	15 „ ..	Do.	Convicted ..	Section 21 (*c*) of the Forest Act.	Rigorous imprisonment for 15 days.	
	4	30 „ ..	Do.	Pending ..	....	....	
	5	*Nil.*	Careless	Do. ..	....	....	
South Arcot.				*Nil.*			
North Salem.	1	1 foot square.	Careless ..	Acquitted ..	....	....	
	2	100 acres ..	Do ..	Convicted ..	Under section 21 (*b*) of the Forest Act.	Rupees 80.	
	3	794 „ ..	Intentional.	Acquitted ..	....	....	
	4	Mere attempt.	Do.	Convicted ..	Under section 21 (*b*) of the Forest Act.	Rupees 3.	
	5	30 acres.	Do.	Pending ..	....	....	
	6	2 „	Do.	Acquitted ..	....	....	
South Salem.	1	3 „	Do.	Convicted ..	Section 21 (*b*) of the Forest Act.	Fine of Rs. 5 in default rigorous imprisonment for one week.	
	2	50 acres.	Do.	Do. ..	Do.	Fine of Rs. 50 in default rigorous imprisonment for 1½ months.	
Trichinopoly.	1	25′ × 4′	Careless.	Pending ..	....	....	
	2	20 acres more or less.	Do. ..	Acquitted ..	....	....	
Madura ..	1	40 acres.	Intentional.	Convicted ..	Section 21 (*b*) of the Forest Act.	Accused fined Rs. 15 each.	
	2	50 „	Do.	Do. ..	Do.	Accused was fined Rs. 35.	
	3	60 „	Do.	Pending ..	....	....	
	4	200 acres.	Intentional in certain game.	Do. ..	....	....	
Tinnevelly *cum* Ramnad.	1	*Nil.*	Careless ..	Convicted ..	Section 21 (*b*) of the Forest Act.	Rupees 10.	
	2	1,500 acres.	Intentional.	Do. one and the other acquitted.	Do.	Rupees 10.	
	3	3,000 „	Do.	Withdrawn.	....	....	Prosecution was not considered justifiable.
				Western Circle.			
South Canara.	* 1	..	Careless.	Compounded for Rs. 5.	....	....	The South Canara compounding fees were very light.
	* 2	30 ..	Do.	Compounded for Rs. 6.	....	....	
	* 3	30 ..	Do.	Convicted ..	Section 21 (*b*) of the Madras Forest Act.	Fined Rs. 15.	
	* 4	10 ..	Do.	Do. ..	Do.	„ Rs. 20.	
	* 5	..	Do.	Do. ..	Do.	„ Rs. 2.	
	* 6	..	Do.	Do. ..	Do.	„ Rs. 5.	
	* 7	40 ..	Do.	Do. ..	Do.	„ Rs. 75.	
	* 8	..	Do.	Do. ..	Do.	„ Rs. 100.	
	9	..	Do.	Compounded for Re. 1.	....	....	
	10	1 ..	Do.	Compounded for Rs. 2.	....	....	
	11	1·5 ..	Intentional.	Compounded for Rs. 3.	....	....	
	12	5 ..	Do.	Compounded for Rs. 27.	....	....	
	13	4 ..	Do.	Compounded for Rs. 3.	....	....	
	14	1 ..	Careless.	Compounded for Rs. 5.	....	....	
	15	..	Do.	Compounded for As 12.	....	....	
	16	..	Do.	Compounded for As. 4.	....	....	

N.B.—*Southern Circle* Details for unreserved land cases in South Vellore and in North Salem have not been furnished.

* Pending cases of previous year.

Appendix to Annual Form No. 71 (Statement No. II prescribed by the Government of India)—*cont.*

District.	Details of prosecutions for offences by fire.						
	Serial number.	Area burnt in acres.	Character of offences (whether intentional) or careless.	Whether acquitted or convicted.	Section of law under which convicted.	Amount of punishment.	Remarks.
				Western Circle—cont.			
South Canara —*cont.*	17	·25 ..	Careless.	Compounded for As. 8.	....	....	
	18	2 ..	Do.	Convicted ..	Section 21 (*b*) of the Madras Forest Act.	Fined Rs. 5.	
	19	2 ..	Do.	Compounded for Rs. 2.	....	....	
	20	10 ..	Do.	Convicted ..	Section 21 (*b*) of the Madras Forest Act.	Fined Rs. 35.	
	21	15 ..	Do.	Do. ..	Do.	,, Rs. 15.	
	22	60 ..	Do.	Do. ..	Do.	,, Rs. 15.	
	23	75 ..	Intentional.	Do. ..	Do.	,, Rs. 40.	
	24	15 ..	Careless.	Compounded for Rs. 10.	....	....	
	25	6 ..	Do.	Compounded for Rs. 5.	....	.. .	
	26	..	Do.	Convicted ..	Section 21 (*b*) of the Madras Forest Act.	Fined Rs. 6.	
	27	...	Do.	Do. ..	Do.	,, Rs. 2.	
	28	40 ..	Do.	Compounded for Rs. 15.	....	....	
	29	3 ..	Do.	Compounded for Rs. 8.	....	....	
	30	5 ..	Do.	Compounded for Rs. 5.	....	....	
	* 31 to 33	804 ..	Intentional.	Acquitted ..	....	....	
	* 34	25 ..	Careless.	Do ..	....	....	
	† 35 to 54	1,209 ..	Do.	Withdrawn.	....	....	
	‡ 55 to 58	112 ..	Intentional.	Do. ..	....	....	
	59 to 73	2,616 ..	Careless.	Pending ..	....	....	
	74 to 78	825 ..	Intentional.	Do. ..	....	....	
Malabar, North.	1	..	Do.	Convicted ..	Section 21 (*b*) of the Madras Forest Act.	Fined Rs. 5.	
Malabar, South.	§ 1	6 ..	Do.	Withdrawn.	....	....	
The Nilgiris.	1	400 ..	Intentional.	Withdrawn.	...	....	
	2 and 3	30 ..	Careless.	Do.	...	.. .	
	4	50 ..	Do.	Convicted ..	Section 21 (*b*) of the Madras Forest Act.	Sentenced to suffer rigorous imprisonment for one month.	
	5	·5 ..	Do.	Do. ..	Do.	Do.	
	6	2 ..	Intentional.	Do. ..	Do.	Sentenced to suffer rigorous imprisonment for 16 days and to pay a fine of Rs. 25; Rs. 17-4-0 to be paid as compensation to the Forest Department.	
Kollegal ..	* 1	160 ..	Do.	Do. ..	Section 21 (*b*) of the Madras Forest Act.	Sentenced to suffer rigorous imprisonment for one month.	
	* 2	1,000 ..	Do.	Do. ..	Do.	Do.	
	* 3	10 ..	Do.	Acquitted ..	....	....	
	4	..	Careless.	Pending ..	.. .	....	
	§ 5	Setting fire to a classified tree.	Intentional.	Compounded for Rs. 10.	....	....	
	§ 6	Setting fire to a tamarind tree.	Do.	Compounded for Rs. 20.	....	....	
	§ 7	Setting fire to a first class tree.	Do.	Pending ..	....	....	
Coimbatore, North.	1	..	Do.	Do. ..	....	....	
	2	..	Do.	Withdrawn.	.. .	.. .	

* Pending cases of previous year.

† Includes four pending cases of last year.

‡ Includes one pending case of last year.

§ Cases relating to unreserved lands.

Appendix to Annual Form No. 71 (Statement No. II prescribed by the Government of India)—*cont.*

District.	Details of prosecutions for offences by fire.						
	Serial number.	Area burnt in acres.	Character of offences (whether intentional) or careless.	Whether acquitted or convicted.	Section of law under which convicted.	Amount of punishment.	Remarks.
			Western Circle—cont.				
Coimbatore, Central.	* 1	·75 ..	Intentional.	Acquitted ..	....	....	
	2	·10 ..	Do.	Convicted ..	Section 21 (*b*) of the Madras Forest Act.	Two accused; fined Rs. 35 each in default to undergo rigorous imprisonment for one month each.	
	3	4 ..	Do.	Do. ..	Do.	Three accused; fined Rs. 10 each in default to undergo rigorous imprisonment for 10 days each.	
	4	..	Do.	Compounded for Rs. 40.	....	....	
	5	150 ..	Careless.	Acquitted ..	....	....	
	6	100 ..	Do.	Pending ..	....	....	
	7 and 8	125 ..	Intentional.		....	....	

* Pending cases of previous year.

ANNUAL FORM No. 72.

Forest Department, Madras Presidency.

AREA of Forest Tracts protected from Fire during 1912–13.

District.	Forest tracts.	Area protected during the previous year.	During the year under report.			Cost during the year under report.	Remarks.
			Area attempted to be protected.	Fires.	Actually protected.		
1	2	3	4	5	6	7	8
	Northern Circle.	ACS.	ACS.	ACS.	ACS.	RS.	
Ganjām ..	Special protection ..	* 103,093	111,149	700	110,449	3,687	* The difference between these and the figures in the report for 1911–12 is due to the adoption of correct figures during 1912–13.
	General do. ..	* 64,410	38,538	3,723	34,815	426	
	Total, Ganjám ..	167,503	(*b*)149,687	(*c*) ,423	(*d*)145,264	(*e*) { 4,113 +346	Adjusted as per Accountant-General's figures.
Vizagapatam.	Special protection ..	† 57,467	67,480	3,035	64,445	2,243	† The increase of 155 acres in column 4 is due to the adoption of correct figures.
	General do. ..	49,924	124,178	16,089	108,089	222	
	Total, Vizagapatam ..	107,391	191,658	19,124	172,534	{ 2,465 — 64	Adjusted as per Accountant-General's figures.
Gōdāvari, Upper.	Special protection ..	489,275	542,636	119,005	423,631	5,215	
	General do. ..	..	..	..	..	..	
	Total, Gōdāvari, Upper ..	489,275	542,636	119,005	423,631	5,215	
Gōdāvari, Lower.	Special protection ..	..	..	..	..		
	General do. ..	215,843	229,735	19,606	210,129	6,101	
	Total, Gōdāvari, Lower ..	215,843	229,735	19,606	210,129	6,101	
Kistna ..	Special protection ..	44,657	47,092	368	46,724	1,796	
	General do. ..	..	..	..	..	..	
	Total, Kistna ..	44,657	47,092	368	46,724	1,796	
Kurnool, East.	Special protection ..	16,567	34,994	5,145	29,849	5,427	
	General do. ..	585,914	605,445	97,986	507,459	..	
	Total, Kurnool, East ..	602,481	640,439	103,131	537,308	5,427	
Kurnool, South.	Special protection ..	76,452	225,395	57,686	168,709	21,513	
	General do. ..	290,064	271,269	20,231	251,038	..	
	Total, Kurnool, South ..	366,516	497,664	77,917	419,747	21,513	
Kurnool, West.	Special protection ..	112,079	158,914	58,555	100,359	10,583	
	General do. ..	226,123	408,584	67,601	340,983	139	
	Total, Kurnool, West ..	338,202	567,498	126,156	441,342	{ 10,722 — 73	Adjusted as per Accountant-General's figures.
	Total, Special ..	899,590	1,188,660	244,494	944,166	52,891	
	Total, General ..	1,432,278	1,677,749	225,236	1,452,513	6,888	
	Grand total ..	2,331,868	2,866,409	469,730	2,396,679	{ 57,352 + 209 57,561	Adjusted as per Accounatnt-General's figures.
	Central Circle.						
Bellary ..	Special protection ..	‡ 60,637	77,580	15,290	62,290	6,199	‡ Revised figure furnished by the Collector.
	General do. ..	‡ 400	400	..	400	(*a*)+1,167 ..	
	Total ..	61,037	77,980	15,290	62,690	7,366	

(*a*) Added or deducted as per Accountant-General's audited figures.
(*b*) Excludes 28,585 acres belonging to the Parlakimedi Maliahs.
(*c*) Excludes 3 acres do.
(*d*) Excludes 28,582 acres do.
(*e*) Excludes Rs. 66–4–0 incurred in Parlakimedi Maliahs.

Area of Forest Tracts protected from Fire during 1912-13—*cont.*

District.	Forest tracts.	Area protected during the previous year.	During the year under report			Cost during the year under report.	Remarks.
			Area attempted to be protected.	Fires.	Actually protected.		
1	2	3	4	5	6	7	8
	Central Circle—cont.	ACS.	ACS.	ACS.	ACS.	RS	
Anantapur ..	Special protection ..	333,127	364,065	42,104	321,961	6,033	
	General do. ..	..	..	..	..	..	
	Total ..	333,127	364,065	42,104	321,961	6,033	
Guntūr ..	Special protection ..	13,186	13,334	1,259	12,075	105	
	General do. ..	21,078	21,203	101	21,102	(*a*) + 81	
	Total ..	34,264	34,537	1,360	33,177	169 355	
Cuddapah, North.	Special protection ..	*217,969	254,939	14,546	240,393	4,658	* Revised figure furnished by the Collector.
	General do. ..	*102,881	76,909	1,816	75,093	(*a*) — 6 708	
	Total ..	320,850	331,848	16,362	315,486	5,360	
Cuddapah, East.	Special protection ..	*209,154	212,895	1,214	211,681	3,376	
	General do. ..	151,454	224,317	19,266	205,051	(*a*) + 487 1,361	
	Total ..	360,608	437,212	20,480	416,732	5,224	
Nellore ..	Special protection ..	*149,690	138,790	2,518	136,272	1,356	
	General do. ..	..	..	..	..	(*a*) + 1 ..	
	Total ..	149,690	138,790	2,518	136,272	1,357	
Chingleput..	Special protection ..	25,846	25,857	†	25,857	907	† Less than one acre.
	General do. .	*108,126	108,126	..	108,126	..	
	Total ..	133 972	133,983	..	133,983	907	
Chittoor ..	Special protection ..	124,361	133,868	928	132,940	1,486	
	General do. ..	342,482	353,952	1,562	352,390	..	
	Total ..	466,843	487,820	2,490	485,330	1,486	
Total..	Special protection ..	1,133,970	1,221,328	77,859	1,143,469	24,120	
	General do. ..	726,421	784,907	22,745	762,162	(*a*)+1,730 2,238	
	Grand Total ..	1,860,391	2,006,235	100,604	1,905,631	28,088	
	Southern Circle.						
Vellore, North.	Special protection ..	91,578	98,830	869	97,961	617	
	General do. ..	235,940	209,018	1,268	207,750	.	
	Total ..	327,518	307,848	2,157	305,711	617	
Vellore, South.	Special protection ..	117,633	118,661	328	118,333	3,155	
	General do. ..	314,798	318,431	785	317,646	..	
	Total ..	432,431	437,092	1,113	435,979	3,155	
South Arcot.	Special protection ..	13,768	13,768	50	13,718	316	
	General do. ..	199,009	207,358	51	207,307	..	
	Total ..	212,777	221,126	101	221,025	316	
Salem, North	Special protection ..	12,901	53,719	425	53,294	} 2,194	
	General do. ..	520,018	482,945	1,828	481,117		
	Total ..	532,919	536,664	2,253	534,411	2,194	

(*a*) Added or deducted as per Accountant-General's audited figures.

Area of Forest Tracts protected from Fire during 1912-13—*cont.*

District.	Forest tracts.	Area protected during the previous year.	During the year under report.			Cost during the year under report.	Remarks.
			Area attempted to be protected.	Fires.	Actually protected.		
1	2	3	4	5	6	7	8
	Southern Circle—cont.	ACS.	ACS.	ACS.	ACS.	RS.	
Salem, South	Special protection ..	228,930	229,700	938	228,762	3,316	
	General do. ..	140,647	142,062	559	141,503	..	
	Total ..	369,577	371,762	1,497	370,265	3,316	
Trichinopoly	Special protection ..	..	22,199	..	22,199	291	
	General do. ..	58,660	74,932	238	74,694	280	
	Total ..	58,660	97,131	238	96,893	571	
Madura ..	Special protection ..	143,244	162,911	4,316	158,595	3,117	
	General do. ..	275,211	263,591	6,894	256,697	..	
	Total ..	418,455	426,502	11,210	415,292	3,117	
Tinnevelly *cum* Rāmnād.	Special protection ..	31,485	35,377	1,273	34,104	2,708	
	General do. ..	204,581	206,712	10,717	195,995	..	
	Total ..	236,066	242,089	11,990	230,099	2,708	
	Total, Special protection.	639,539	735,165	8,199	726,966	15,714	
	Total, General protection.	1,948,864	1,905,049	22,340	1,882,709	280	
	Grand total (Special and General).	2,588,403	2,640,214	30,539	2,609,675	15,994	
	Western Circle.						
South Canara.	Special protection ..	128,526	132,622	4,764	127,858	2,535 *+1,071	RS. *Fire-tracing cart tracks and cart stands. 13 Fire-tracing Mysore-South Canara boundary. 668 Cost of reclearing unprotected length in Coondapur range. 287 Cost of previous year disbursed during the year. 103 Total .. 1,071
	General do. ..	374,068	377,935	3,712	374,223	822	
	Total ..	502,594	510,557	8,476	502,081	4,428	
Malabar, North.	Special protection ..	124,916	139,100	2,511	136,589	7,049	
	General do. ..	..	..	..	..	..	
	Total ..	124,916	139,100	2,511	136,589	7,049	
Malabar, South.	Special protection ..	80,720	80,907	118	80,789	2,457 + 10	Cost of clearing fire lines round the buildings in Palghat.
	General do. ..	..	..	..	..	..	
	Total ..	80,720	80,907	118	80,789	2,467	
The Nilgiris.	Special protection ..	80,748	78,051	5,850	72,201	3,860	
	General do. ..	..	..	..	..	..	
	Total ..	80,748	78,051	5,850	72,201	3,860	
Kollegal ..	Special protection ..	64,314	66,757	66	66,697	1,524	
	General do. ..	340,730	400,450	12,405	388,045	1,178	
	Total ..	405,044	467,207	12,465	454,742	2,702	

Area of Forest Tracts protected from Fire during 1912–13—*cont*

District.	Forest tracts	Area protected during the previous year.	During the year under report.			Cost during the year under report.	Remarks.
			Area attempted to be protected.	Fires.	Actually protected.		
1	2	3	4	5	6	7	8
	Western Circle—cont.	ACS.	ACS.	ACS.	ACS.	RS.	
Coimbatore, North.	Special protection ..	29,867	70,574	1,927	68,647	3,010	
	General do. ..	452,969	518,635	3,319	515,316	..	
	Total ..	482,836	589,209	5,246	583,963	3,010	
Coimbatore, Central.	Special protection ..	67,712	104,627	2,150	102,477	3,289	
	General do. ..	121,197	121,197	82	121,115	..	
	Total ..	188,909	225,824	2,232	223,592	3,289	
Coimbatore, South.	Special protection ..	33,463	45,737	778	44,959	2,607	
	General do. ..	191,667	182,516	2,741	179,775	..	
	Total ..	225,130	228,253	3,519	224,734	2,607	
	Total, Special protection.	610,266	718,875	18,158	700,217	26,231	
	Total, General protection.	1,480,631	1,600,733	22,259	1,578,474	+1,081 2,000	
	Grand total ..	20,90,897	2,319,108	40,417	2,278,691	29,412	
Total Presidency.	Special protection ..	3,283,365	3,863,528	348,710	3,514,818	121,867	
	General do. ..	5,588,194	5,968,438	292,580	5,675,858	11,406	
	Grand total, Presidency.	8,871,559	9,831,966	641,290	9,190,676	133,273	

Annual Form No. 73.

Forest Department, Madras Presidency.

Area closed and open to grazing during 1912–13.

District.	Area in square miles.						
	Closed to all animals.		Closed to both goats and sheep.		Area closed to goats only.	Open to all animals.	Total forest area as per Form No. 65.
	Whole year.	Part of year.	Whole year.	Part of year.		Whole year.	
1	2	3	4	5	6	7	8
	SQ. MLS.	SQ. MLS.	SQ. MLS.		SQ. MLS.	SQ. MLS.	SQ. MLS.
Northern Circle.							
Ganjām	76	..	..	..	(*b*) 488	(*c*) ..	564
	..	..	..	..	..	75	75
Vizagapatam ..	14	..	2	..	287	..	303
	..	..	..	..	10	..	10
Gōdāvari, Upper ..	1	..	..	..	427	..	428
	..	..	..	..	..	..	99
Do. Lower ..	14	..	..	..	390	..	404
	75	..	..	..	..	..	75
Kistna	36	8	..	..	158	76	278
	..	..	..	..	..	4	4
Kurnool, East	55	..	..	..	946	..	1,001
Do. South	392	..	..	..	386	..	778
Do. West	235	10	..	..	613	..	858
Total ..	823	18	2	..	3,695	76	4,614
	75	..	..	..	10	79	263
Central Circle.							
Reserved Forest.							
Bellary	142	..	..	..	383	101	626
Anantapur	146	4	..	..	593	..	743
Guntūr	81	..	..	..	613	120	814
Cuddapah, North	60	81	..	..	573	20	734
Do. East	171	51	..	..	843	18	1,083
Nellore	41	..	69	..	566	69	745
Chingleput	34	..	..	..	173	2	209
Chittoor	136	29	..	..	672	3	840
Total ..	811	165	69	..	4,416	333	5,794
Reserved Lands.							
Bellary	32	..	..	..	..	32	64
Anantapur	..	..	..	..	..	11	1
Guntūr	..	..	..	..	..	..	..
Cuddapah, North	..	..	..	..	..	..	..
Do. East	..	..	..	..	..	..	..
Nellore	..	..	..	..	..	..	..
Chingleput	..	..	..	..	..	..	..
Chittoor	..	..	..	..	..	..	..
Total ..	32	..	..	..	..	43	75
Grand total ..	843	165	69	..	4,416	376	5,869
Southern Circle.							
Reserved Forests.							
North Vellore	69	..	..	..	404	26	499
South do.	44	..	..	..	701	..	745
South Arcot	31	..	..	..	314	..	345
North Salem	106	..	..	..	649	37	792
South do.	62	4	..	..	515	..	581
Trichinopoly	49	..	3	..	304	..	356
Madura	113	..	..	..	485	68	666
Tinnevelly *cum* Rāmnād ..	208	43	4	..	174	..	429
Total ..	682	47	7	..	3,546	131	4,413
Reserved Land.							
North Vellore	..	..	..	..	(*a*)	..	..
North Salem	..	..	..	..	25	21	46
South do.	..	..	..	..	6	..	6
Trichinopoly	..	..	..	..	3	..	3
Madura	..	..	..	..	(*a*)	..	..
Tinnevelly	..	..	..	..	(*a*)	..	..
Total ..	..	..	..	..	34	21	55

Note.—(*Northern Circle*). Of the figures in brackets the upper ones denote the area of reserved forests, and the lower ones the area of reserved lands.

(*a*) Area omitted being less than a square mile.

(*b*) Excludes 57 square miles belonging to the Parlakimedi Maliahs.

(*c*) Do. 24 do. do.

Area closed and open to grazing during 1912–13—*cont.*

District.	Area in square miles.						
	Closed to all animals.		Closed to both goats and sheep.		Area closed to goats only.	Open to all animals.	Total forest area as per Form No. 65.
	Whole year.	Part of year.	Whole year.	Part of year.		Whole year.	
1	2	3	4	5	6	7	8
WESTERN CIRCLE.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
South Canara				*Reserved forests.*			
	7	..	..	..	791	..	798
				Reserved lands.			
	.	..	..	..	*	..	*
Total ..	7	..	..	..	791	..	798
Malabar, North ..				*Reserved forests.*			
	30	..	231	..	..	..	261
				Reserved lands.			
	..	..	1	.	..	..	1
Total ..	30	..	232	.	..	..	262
Malabar, South ..				*Reserved forests.*			
	108	..	..	..	..	..	108
				Reserved lands.			
	55	..	..	..	..	..	55
Total ..	163	..	..	..	..	..	163
The Nilgiris				*Reserved forests.*			
	23	..	..	..	455	..	478
				Reserved lands.			
	4	..	..	..	78	..	82
Total ..	27	..	..	..	533	..	560
Kollegal				*Reserved forests.*			
	109	..	..	..	338	..	447
				Reserved lands.			
	54	..	..	..	229	..	283
Total ..	163	..	..	..	567	..	730
Coimbatore, North ..				*Reserved forests.*			
	99	30	..	..	792	..	921
				Reserved lands.			
	..	..	..	..	1	..	1
Total ..	99	30	..	..	793	..	922
Coimbatore, Central ..				*Reserved forests.*			
	153	9	..	..	191	..	353
				Reserved lands.			
	10	..	..	..	..	..	10
Total ..	163	9	..	..	191	..	363
Coimbatore, South ..				*Reserved forests.*			
	88	11	179	..	176	..	454
				Reserved lands.			
	*	..	..	..	..	..	*
Total ..	88	11	179	..	176	..	454
Total { Reserved forest.				*Reserved forests.*			
	617	50	410	..	2,743	..	3,820
Do. lands.				*Reserved lands.*			
	123	..	1	..	308	..	432
Grand total ..	740	50	411		3,051	..	4,252
Grand total, Presidency ..	3163	280	489	..	14,752	683	19,466

* Less than one square mile.

ANNUAL

Forest Department,

RETURN of Grazing in the

Districts.	Grazing on payment. Number									
	At enhanced or special rates.					At full rates.				
	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.
1	2	3	4	5	6	7	8	9	10	11
NORTHERN CIRCLE.					RS.					RS.
Ganjām	..	..	..	..	..	(*s*) 11,703	(*t*) 37,407	S 100	..	(*u*) 11,412
Vizagapatam	(*a*) 168	(*a*) 2,959	(*a*) S 3,372	..	1,245	1,219	17,871	S 3,230	..	4,111
Gōdāvari, Upper	..	..	..	..	..	..	..	..	..	..
									..	1,634
Do. Lower ..	(*a*) 8,756 (*d*) 1,209	(*a*) 11,879 (*d*) 585	..	..	8,474	943	11,046	S 184	Fodder grass and lease of grass.	843
Kistna	(*d*) 976 (*g*) 468	(*d*) 7,300 (*g*) 3,513	(*d*) S 2,961 (*g*) G 7,984	..	10,002	6,883	35,527	S 20,696	..	11,183
									..	4,489
Kurnool, East	(*a*) 5,554	(*a*) 81,583 X 95	(*a*) S 32,631	..	27,263	1,848	6,902	S 26,683	Fodder grass 199 C.L.	155
									..	* 6,052
Do. South	(*a*) 597	(*a*) 9,859	(*a*) S 19,644	..	5,219	2,022	15,695	S 24,973	Initial payment on Lodge permit.	53
Do. West	(*a*) 4,788	(*a*) 21,025	(*a*) S 10,743	Fodder grass 61 C.L.	9,012	2,947	30,405	S 40,675	..	10,620
Total ..	22,516	138,703 (X) 95	G 7,984 S 69,351	Fodder grass 61 C.L.	61,215	27,565	154,853	S 116,541	Fodder grass 199 C.L.	50,552
Reserved lands—										
Gōdāvari, Upper ..	(*b*) 185	(*b*) 987	..	..	401	..	..	..	..	..
Do. Lower ..	(*a*) 6,959	(*a*) 8,326	..	..	5,561	..	..	..	Fodder grass.	31
Kistna	..	..	..	..	..	301	91	S 320	..	160
Total ..	7,144	9,313	..	..	5,962	301	91	S 320	..	191
Grand total ..	29,660	148,016 (X) 95	G 7,984 S 69,351	Fodder grass 61 C.L.	67,177	27,866	154,944	S 116,861	Fodder grass 199 C.L.	50,743
CENTRAL CIRCLE.										
Bellary	..	..	..	..	..	14,976	61,764	G 51,856	..	37,832
	..	..	..	..	..	..	..	S 168,255	..	
Anantapur	..	..	..	..	..	4,408	69,884	S 150,029	Fodder grass.	29,288
	(*i*) ..	..	..	..	..	22	2,298	S 5,098	498 C.L.	
	(*j*) 930	2,581	G 2,593 S 7,005	..	2,310	16,889	24,759	G 38,709 S 96,168	..	23,620
Guntūr	..	..		..		..	..		..	..
	(*k*) 969	57,876	G 12,637 S 67,387	..	37,435	..	..	..	..	..
	..			..		..	..	..	..	..
	(*l*) ..	2,596	..	..	2,596	..	..	..	..	..
	..	..	..	..	..	1,551	33,947	G 6,898	..	18,285
Cuddapah, North ..	..	..	..	..	..	..	..	S 84,156	..	
	(*m*) ..	..	..	..	..	..	..	..	..	..
	..	..	..	..	..	Penning fees.			..	23
Do. East	..	..	..	..	..	2,940	39,931	G 4,540	..	16,487
	..	..	..	..	..	..	..	S 60,024	..	
	(*p*) ..	68,546	G 19,981	..	..	8,785	..	..	..	3,294
Nellore	..	..	S 120,901	..	37,244	..	Lease of grass.			15
	..	..	..	..	..	..	Kancha rents.			12,993
	..	..	..	..	..	..	Penning fees.			3
Chingleput	..	..	..	..	..	2,364	32,532	G 542	..	12,820
	..	..	..	..	..	..	..	S 60,784	..	
Chittoor	..	..	..	..	..	2,620	76,100	G 520	..	20,646
	..	..	..	..	..	..	..	S 53,379	..	
	..	..	..	..	..	..	Penning fees, etc.		..	23
Total ..	1,899	131,599	G 35,211 S 195,293	..	79,585	54,555	341,215	G 103,065 S 677,893	..	1,75,329

* There is an excess collection of Rs. 9.

G. = Goats. S. = Sheep. X. = Young ones at half rates. C.L. = Cart-loads at 5 annas per cart-load.

(*a*) The enhanced rates are 8 annas per buffalo, 4 annas per cow or bullock and 2 annas per sheep.

(*b*) The enhanced rates in the Nugur taluk are 8 annas per buffalo and 5 annas per cow or bullock for alien cattle.

(*c*) The privileged rates in the Bhadrāchalam taluk are 2 annas per buffalo, 1 anna per cow or bullock and 6 pies per sheep.

(*d*) The enhanced rates are 12 annas per buffalo, 6 annas per cow or bullock and 3 annas per sheep or goat. The full rates in Gōdāvari, Lower, are 4 annas per buffalo, 2 annas per cow or bullock and 1 anna 6 pies per sheep.

Central Circle.—The full rates are As. 6 per buffalo, As. 3 per cow and As. 1-6 per sheep.

As. 1-6 per goat in Bellary, Anantapur and Guntūr.
,, 8 ,, in North and East Cuddapah.
,, 4 ,, in Chingleput and Nellore.
,, 12 ,, in Chittoor.

(*i*) Half the full rates for half-year.

(*j*) At As. 8 per buffalo, As. 4 per cow and As. 2 per sheep and goat.

(*k*) At ,, 12 ,, ,, 6 ,, and ,, 3 ,, ,,

(*l*) Plough bullocks at Re. 1.

FORM No. 74.

Madras Presidency.

State forests during 1912-13.

of animals.						Grazing free. Number of animals.										
At privileged rates.						By right under settlement.					During pleasure of Government or otherwise than under settlement.					
Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received. Actual.	Fees received. Value at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Total value of fees at full rates.	Grand total of value at full rates.
12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
				Rs.	Rs.					Rs.					Rs.	Rs.	Rs.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11,412
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5,356
(*e*) 4,934	(*e*)22,683	(*e*) S 8,332	..	2,295	6,884	..	..	..	..	..	701	16,638	S 52	..	3,389	3,389	10,273
(*e*) 1,694 (*f*) 15	(*e*)14,670 (*f*) 33	..	..	1,027	2,265	..	..	..	..	..	..	..	..	..	..	..	13,216
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	21,185
..	..	..	..	..	..	157	235	G 762 S 1,140	..	281	..	..	..	..	..	..	32,188
..	..	..	..	..	..	2	26	S 66	..	12	..	..	..	..	..	..	11,336
..	..	..	..	..	..	..	1,491	S 3,303	..	589	..	..	..	..	..	..	20,221
6,643	(*g*)37,386	S 8,332	..	3,322	9,149	159	1,752	G 762 S 4,509	..	882	701	16,638	S 52	..	3,389	3,389	1,25,187
(*h*) 5,641	(*h*)32,302	*h* S 2,225 *h* G 3,238	11	5,841	8,686	..	..	..	..	..	13	3,531	..	..	667	667	9,754
..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	5,592
..	..	..		..	..	..	..	..	..	..	..	..	..		..	..	160
5,641	32,302	S 2,225 G 3,238	11	5,841	8,686	..	..	..	..	..	13	3,531	..	..	667	667	15,506
12,284	(*g*)69,688	G 3,238 S 10,557	11	9,163	17,835	159	1,752	G 762 S 4,509	..	882	714	20,169	S 52	..	4,056	4,056	1,40,693
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	37,832
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	29,288
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	65,961
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(*m*) ..	110	S 200	..	20	40	..	..	..	..	..	..	..	..		..	..	18,348
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
(*n*)	106	S 350	..	32	82	..	804	..	..	151	..	..	..	..	..	..	16,720
(*m*) ..	80	S 150	..			..	..	..	..	..	..	..	..	..	..	..	
(*r*) ..	272	S 727	..	119	159	..	..	..	..	..	..	5,251	..	..	1,313	1,313	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	55,021
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
..	(*o*) ..	S 74	..	2	7	..	..	..	..	..	..	77	..		14	14	12,841
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	20,669
..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..	..
..	568	1,501	..	173	288	..	804	..	..	151	..	5,328	..	..	1,327	1,327	2,56,680

(*e*) The privileged rate is 1 anna per bullock or cow or buffalo.
(*f*) One-fourth seigniorage rates at 1 anna per cow and 2 annas per buffalo collected specially in Forest offences
(*g*) The enhanced rates are Re. 1 per bullock or cow or buffalo and 4 annas per goat.
(*h*) The privileged rates in the Nugur taluk are 4 annas per buffalo, 2 annas per cow or bull, 1 anna per sheep, 2 annas per horse and 1 anna 3 pies per goat.

(*m*) At As. 1-6 per cow and 9 pies per sheep.
(*n*) At 1 anna per cow and 6 pies pers heep.
(*o*) At one-fourth rate, *i.e.*, As. 4-6 per sheep.
(*p*) As. 4 per cow, As. 2 per sheep and As. 4 per goat.
(*q*) Corrected in the Board's office.
(*r*) As. 3 per cow, and As. 1-6 per sheep.
(*s*) Excludes 9 buffaloes belonging to the Parlakimedi Maliahs
(*t*) Do. 1,235 cows do. do.
(*u*) Do. Rs. 235 received as fees in the Parlakimedi Maliahs.

Return of Grazing in the

District.	Grazing on payment. Number									
	At enhanced or special rates.					At full rates.				
	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received
1	2	3	4	5	6	7	8	9	10	11
SOUTHERN CIRCLE.					RS.					RS.
Vellore, North	..	..	..	..	..	2,422	71,645	G. 5,146 S. 85,803	..	26,245 (g)+ 258
Do. South	..	20,665	..	..	5,166	1,376	86,482	S. 38,883	..	20,377 (a) 34 (g)+ 31
Arcot, South	..	(b) 187	..	..	56	4,308	62,274	S. 143,880	..	26,781 (g)+ 961
Salem, North	2,218	122,163	G 7,316 S. 21,316	..	37,972	144	35,723	S. 22,149	..	8,829 (a) 614
Do. South	..	..	..	..	..	1,118	95,975	S. 30,548	..	21,278 (c) 25
Trichinopoly	..	..	..	..	..	3,792	54,283	G. (d) 700 S. 186,042	2	29,217
Madura	453	70,366	G. 32,730 S. 37,035	407	38,914 (g)—6,216	..	..	..	..	..
Tinnevelly *cum* Ramnad.	..	..	..	..	..	492	17,145	S. 28,195	..	6,042 (a) 5 (e) 4 (f) 200
Total ..	2,671	213,331	G. 40,046 S. 58,351	407	75,892	13,652	423,527	G. 5,846 S. 535,500	2	1,10,901
WESTERN CIRCLE. *Reserved Forests.*										
South Canara	..	..	..	..	..	5,328	38,565	..	..	9,229 (r) — 4
Malabar, North	..	..	..	..	..	3,537	6,453	..	(l) 1	2,542
Do. South	..	..	..	..	..	..	..	..	..	(m) 2
The Nilgiris	..	(i) 1,545	..	..	773	9,514	G. 20,665 (k) 150	2,362	..	7,678 (m) 189 (s) + 2
Kollegal *	1,780	56,234	6,159	..	15,718 (j) 11 (t) + 1	..	..	..	..	..
Coimbatore, North * ..	5,662	84,456	33,178	..	28,092 (m) 1,024	..	..	..	..	..
Do. Central ..	..	..	..	..	..	206	20,706	14,319	..	5,302 (m) 1,261 (n) 140
Do. South ..	..	..	..	..	..	369	13,253	150	..	2,637 (e) 100 (q) + 1
Total ..	7,442	142,235	39,337	..	45,619	18,954	99,792	16,831	1	29,079
Reserved Lands.										
The Nilgiris	..	(i) 414	..	..	207	860	891	..	..	490
Kollegal *	817	19,215	423	..	5,265	..	..	..	..	..
Total ..	817	19,629	423	..	5,472	860	891	.	..	490
Grand Total, Presidency.	42,489	654,955	S. 362,755 G. 83,241	407	274,345	115,887	1,020,369	S. 1,347,085 G. 108,911	3	396,542

G = Goats. S = Sheep.

Southern Circle.—The enhanced or special rates are As. 8 per buffalo, As. 4 per cow, bullock, or other animal, As. 8 per goat and As. 2 per sheep.

The full rates are As. 6 per buffalo, As. 3 per cow, bullock or other animal, As. 12 per goat and As. 1-6 per sheep.

The privileged rates are half the full rates.

(a) Penning license fee.
(b) 97 cows at As. 4 each, 37 cows at As. 5 each and 53 cows at As. 6 each.
(c) Sale amount of grass.
(d) At 4 annas each.
(e) Renewal fee for issuing permits in lieu of lost ones.
(f) Lease amount for grazing in Kavalkutti Parambu Reserved Forest.
(g) Added and substracted to tally with Accountant-General's figure.
(h) Free removal of grass.

Western Circle.—The full rates are As. 6 per buffalo, As. 3 per cow, bullock or other animals and As. 1-6 per sheep.

* Annas 8 per buffalo, As. 4 per cow, bullock or other animals and As. 2 per sheep.

(i) Annas 8 per cow or bullock.
(j) Excess remittance made by mistake.
(k) Calves, half-rate.
(l) Elephants As. 4 per diem for 21 days.
(m) Sale-proceeds of fodder grass.

State forests during 1912-1913—*cont.*

of animals.						Grazing free. Number of animals.										
At privileged rates.						By right under settlement.					During pleasure of Government or otherwise than under settlement.					
Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received. Actual.	Fees received. Value at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Total value of fees at full rates.	Grand total of value at full rates.
12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
				Rs.	Rs.										Rs.	Rs.	Rs.
103	960	S. 20	..	110	220	..	..	..	..	..	..	..	..	..	(*h*) 7,500	7,500	34,223
2,088	13,589	S. 365	..	1,683	3,366	..	..	..	..	..	439	1,437	S. 34	..	437	437	29,411
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	27,798
..	..	..	..	..	..	..	..	..	..	..	..	150	..	..	28	28	47,443
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	21,303
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	29,217
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	32,698
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6,251
2,191	14,549	S. 385	..	1,793	3,586	..	..	..	..	..	439	1,587	S. 34	..	7,965	7,965	2,28,344
(*o*)10,041	(*o*)10,377	..	..	2,552	5,711	..	..	..	..	..	..	..	..	..	..	..	14,936
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2,542
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
..	..	(*p*)19,255	..	84	1,805	..	..	..	..	..	..	..	..	..	..	..	10,447
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15,730
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	29,116
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6,703
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2,738
10,041	10,377	19,255	..	2,636	7,516	..	..	..	..	..	..	..	..	..	..	..	82,214
..	..	..	..	..	..	..	..	..	..	..	1,872	..	..	..	702	702	1,399
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5,265
..		..	..	..	..	..	..	..	..	..	1,872	..	..	..	702	702	6,664
24,516	95,182	31,698 G. 3,238	..	4,613	20,553	159	2,356	4,509	762	1,033	3,025	27,084	86	..	14,050	14,050	6,32,381

(*n*) Lease amount of the right of grazing.
(*o*) Annas 2 per buffalo, cow or bullock.
(*p*) Annas 3 per 100 per diem.
(*q*) Variation as per Accountant-General's audited figures.
(*r*) Wrongly credited to II (*c*) and included under that head in the Accountant-General's audited figures.
(*s*) Renewal fees on time-expired permits.
(*t*) Added to round off fraction.

LIBRARY OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY

ABSTRACT of animals licensed to graze on payment

Circle.	Buffaloes.	Bullocks and cows.	Sheep.	Goats.	Other animals.	Total.
Northern Circle	69,810	(a) 372,743	196,769	11,222	11	(a) 650,555
Central Circle	56,454	473,382	874,687	138,276	..	1,542,799
Southern Circle	(a) 18,514	(a) 651,457	(a) 594,236	45,692	409	(a) 1,310,508
Western Circle	38,114	272,924	75,846	..	1	386,885
Grand Total, Presidency ..	182,892	1,770,506	1,741,538	195,390	421	3,890,747

(a) Corrected in the Board's office.

ANNUAL FORM No. 75.

Forest Department, Madras Presidency.

ARTIFICIAL reproduction for the year 1912–13.

Districts.	Area in acres.				Expenditure during the year.		Total expenditure from commencement.		Revenue during the year.	Total revenue from date of creation of plantation
	On 1st July 1912.	Added during the year.	Excluded during the year.	Area on 30th June 1913.	Creation.	Upkeep.	Creation.	Upkeep.		
1	2	3	4	5	6	7	8	9	10	11
A.—Regular Plantations.										
NORTHERN CIRCLE.					Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Ganjām	(*b*) 412	(*c*) ..	..	(*d*) 412	..	(*e*) 43	28,199	12,786	2,537	13,372
Vizagapatam	78	..	..	78	..	..	..	5	510	2,085
Gōdāvari, Lower	943	80	74	949	3,278	1,841	48,187	21,315	14,815	81,970
Kistna	1,157	9	111	1,055	31	5,077	19,540	57,570	5,946	61,998
Kurnool, East	96	42	8	130	6,371	2,262	38,471	22,441	..	..
Do. South	4	16	..	20	622	2,394	1,500	2,394	..	..
Do. West	893	212	..	1,105	31,159	6,657	2,36,276	26,922	2,357	8,507
Total ..	3,583	359	193	3,749	41,461	18,274	3,72,173	1,43,433	26,165	1,67,932
B.—Taungya Plantations (*a*).										
Gōdāvari, Upper	125	..	..	125	..	..	1,826	586	..	934
C.—Cultural Operations.										
Ganjām	399	..	..	399	..	6	2,233	169	..	..
Vizagapatam	20	24	..	44	129	26	352	83	..	..
Gōdāvari, Upper	827	1	1	827	15	75	2,177	856	..	145
Do. Lower	2,181	221	..	2,402	210	..	2,358	1,032	..	..
Kistna	3,103	545	646	3,002	2,131	205	7,078	2,785	1,494	30,939
Kurnool, East	33	..	..	33	..	1,496	9,684	3,334	..	..
Do. South	101	73	..	174	1,364	198	5,758	700	..	..
Do. West	1,485	463	..	1,948	1,550	..	13,984	..	..	..
Total, Northern Circle ..	8,149	1,327	647	8,829	5,399	2,006	43,624	8,959	1,494	31,084
A.—Regular Plantations.										
CENTRAL CIRCLE.										
Bellary	511	89	* 71	529	617	2,932	8,818	61,007	14	14
Anantapur	..	..	..	..	..	..	..	..	..	..
Guntūr	2,773	549	53	3,269	2,649	12,024	51,814	27,491	5,059	27,190
Cuddapah, North	10	..	..	10	28	..	560	..	..	..
Do. East	1,496	..	1,488	8	..	88	..	..	61	..
Nellore	5,281	10	..	5,291	15,772	1,780	1,56,705	1,780	35,405	4,47,777
Chingleput	356	..	..	356	301	754	7,458	4,876	458	10,074
Chittoor	..	..	..	..	..	..	..	..	..	..
Total ..	10,427	648	1,612	9,463	19,367	17,578	2,25,355	95,154	40,997	4,85,055
B.—Taungya Plantations—Nil.										
C.—Cultural Operations.										
Bellary	19,586	† 1,025	..	20,611	5,436	3,567	83,496	7,226	..	..
Anantapur	64,146	6,831	..	70,977	3,039	76	39,644	263	..	274
Guntūr	1	182	..	183	316	..	348	..	..	..
Cuddapah, North	1,313	400	..	1,713	419	24	855	136	560	1,980
Do. East	303	1,488	..	1,791	..	595	492	1,104	..	..
Nellore	462	..	..	462	..	5	2,276	5	..	..
Chingleput	11,888	..	..	11,888	213	536	2,679	4,290	..	..
Chittoor	208	..	..	208	..	368	..	860	38	49
Total, Central Circle ..	97,907	9,926	..	107,833	9,423	5,171	1,29,790	13,884	598	2,303

(*a*) Will be omitted from next year as all the trees are reported to have died—*vide* paragraph 23 of the circle report.
(*b*) Excludes Teak plantations of 3 acres belonging to the Parlakimedi Maliahs.
(*c*) Do. 1 acre do.
(*d*) Do. 4 acres do.
(*e*) Excludes Rs. 22-10-0 incurred in the Parlakimedi Maliahs.

* Given up for want of water in the wells. † Includes 300 acres of Badanahal reserve sown by ryots.

Artificial reproduction for the year 1912–13—*cont.*

District.	Area in acres.				Expenditure during the year.		Total expenditure from commencement.		Revenue during the year.	Total revenue from date of creation of plantation.
	On 1st July 1912.	Added during the year.	Excluded during the year.	Area on 30th June 1913.	Creation.	Upkeep.	Creation.	Upkeep.		
1	2	3	4	5	6	7	8	9	10	11
				A.—Regular Plantations.						
SOUTHERN CIRCLE.					RS.	RS.	RS.	RS.	RS.	RS.
North Vellore	1,260	..	..	1,260	3,341	516	16,786	1,29,213	813	64,086
South ,,	..	..	..	..	..	..	..	..	..	..
South Arcot	1,366	..	..	1,366	3,376	700	40,817	7,956	47,419	2,25,991
North Salem	..	..	..	..	..	..	..	..	..	..
South ,,	552	..	..	552	..	..	31,973	8,715	512	8,761
Trichinopoly	814 (a)—100	10	..	724	104	1,331	34,561	9,062	11,416	28,396
Madura	494 +(b) 3	95	..	592	4,808	816	30,178	4,663	102	1,836
Tinnevelly *cum* Rāmnād	1,757	11	..	1,768	20	681	3,322	5,285	..	..
Total	6,146	116	..	6,262	11,649	4,044	1,57,637	1,64,894	60,262	3,29,070
				B.—Taungya Plantations.						
North Vellore	818	..	..	818	77	60	77	* 120	..	* 66
South ,,	237	..	..	237	..	..	.	..	310	2,115
South Arcot	..	..	..	..	..	..	..	..	..	..
North Salem	..	..	..	..	..	..	..	..	..	..
South ,,	..	..	..	..	..	..	..	..	..	..
Trichinopoly	..	..	..	..	..	..	..	..	..	..
Madura	..	..	..	..	..	..	..	..	..	..
Tinnevelly *cum* Rāmnād	1	..	..	1	..	4	7	4	..	..
Total	1,056	..	..	1,056	77	64	84	124	310	2,181
				C.—Cultural Operations.						
North Vellore	835	..	..	835	..	..	* 20	..	..	578
South ,,	143	429	..	572	153	49	153	49	..	..
South Arcot	3,605	953	..	4,558	814	..	2,565	487	..	..
North Salem	585	..	..	585	669	.	5,775	30,293	428	7,057
South ,,	656	..	..	656	34	185	1,697	1,018	4	144
Trichinopoly	1,943	..	(c)1,943	..	.	..	..	..	..	..
Madura	7	17	..	24	82	48	155	48	112	112
Tinnevelly *cum* Rāmnād	2,691	342	..	3,033	273	..	4,367	102	..	..
Total, Southern Circle	10,465	1,741	1,943	10,263	2,025	282	14,732	31,997	544	7,891
				A.—Regular Plantations.						
WESTERN CIRCLE.										
South Canara	124	..	..	124	..	155	2,462	7,067	860	18,152
Malabar, North	870	..	..	870	..	172	15,164	17,518	200	200
Do. South	6,387	86	..	6,473	429	6,079	5,37,942	5,22,170	1,31,438	16,85,830
The Nilgiris	1,766	..	..	1,766	444	2,283	6,404	2,80,297	26,481	5,14,695
Coimbatore, Central	522	37	..	559	59	20	472	252	..	..
Do. South	157	..	..	157	..	1,027	9,947	2,454	..	..
Total	9,326	123	..	9,949	932	9,736	5,72,391	8,29,758	1,58,979	22,18,877

* Difference due to omission in totals of previous year's return.

(*a*) Deducted on account of correct area as per working-plan. (*b*) Added as per correct area now reported.

(*c*) Portions along the Coleroon left bank were handed over to Public Works Department and the remaining area abandoned. Hence figures in columns 8 and 9 omitted.

Artificial reproduction for the year 1912–13—*cont.*

District.	Area in acres.				Expenditure during the year.		Total expenditure from commencement.		Revenue during the year.	Total revenue from date of creation of plantation.	Remarks.
	On 1st July 1912.	Added during the year.	Excluded during the year.	Area on 30th June 1913.	Creation.	Upkeep.	Creation.	Upkeep.			
1	2	3	4	5	6	7	8	9	10	11	12
					B.—Taungya Plantations.						
Western Circle—*cont.*					Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
South Canara ..	547	..	..	547	..	..	46	..	..	..	This figure is misleading as the same area is dealt with in more than one year, but has been shown as an annual addition.
Malabar, North ..	753	..	..	753	..	95	..	10,728	145	4,783	
Total ..	1,300	..	..	1,300	..	95	46	10,728	145	4,783	
					C.—Cultural Operations.						
South Canara ..	..	..	..	..	..	(*a*) 12	..	185	..	..	
Malabar, North ..	139	1,672	..	1,811	538	235	538	6,517	..	..	
Do. South ..	212	2	..	214	124	185	2,168	1,248	..	..	
The Nilgiris	505	..	..	505	5	114	367	29,302	..	..	
Kollegal	6,532	38	..	6,570	123	149	(*b*) 330	149	..	..	
Coimbatore, North ..	19,744	5,868	..	25,612	186	..	375	..	159	159	
Do. Central..	295	237	..	532	406	105	1,095	194	..	37	
Do. South ..	473	226	..	699	173	47	2,031	1,096	..	..	
Total ..	27,900	8,043	..	35,943	1,555	847	6,904	38,691	159	196	
Total, Western Circle.	39,026	8,166	..	47,192	2,487	10,678	5,79,341	8,79,177	1,59,283	22,23,856	
Total, Regular Plantations, Presidency.	29,982	1,246	1,805	29,423	73,409	49,632	13,27,556	12,33,239	2,86,403	32,00,934	
Total, Taungya Plantations, Presidency.	2,481	..	..	2,481	77	159	1,956	11,438	455	7,898	
Total, Cultural Operations, Presidency.	144,421	21,037	2,590	162,868	18,402	8,306	1,95,050	93,531	2,795	41,474	
Grand Total, Regular Plantations, Cultural Operations and Taungya, Presidency.	176,884	22,283	4,395	194,772	91,888	58,097	15,24,562	13,38,208	2,89,653	32,50,306	

(*a*) Cost incurred in sowing seeds broadcast in several reserved forests

(*b*) Excludes Rs. 2 wrongly added by the Collector last year.

ANNUAL

Forest Department,

OUTTURN (in cubic feet solid) of Timber, Fuel and Bamboos

District.	Timber.					Fuel.				
	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.
1	2	3	4	5	6	7	8	9	10	11
NORTHERN CIRCLE.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. F.	C. FT.
Ganjām.										
Reserved forests—										
Sâl	14,847	44,090	..	..	58,937	..	..	..	..	..
Miscellaneous	8,822	2,636	8,920	..	20,378	..	..	..	..	..
Total ..	23,669	46,726	8,920	..	79,315	39,948	5,500	..	..	45,448
Unreserved lands—										
Sâl	11,282	24,211	..	..	35,493	..	..	..	..	..
Miscellaneous	5,312	435,333	3,190	..	443,835	..	..	..	..	..
Total ..	16,594	459,544	3,190	..	479,328	626	420,814	..	..	421,440
Total, Ganjām ..	(*a*)40,263	(*b*)506,270	(*c*) 12,110	..	(*d*)558,643	40,574	(*e*)426,314	..	..	(*e*)466,888
Vizagapatam.										
Reserved forests—										
Miscellaneous	527	140	37	..	704	69,210	39,510	..	..	108,720
Unreserved lands—										
Yegisi	115	..	..	..	115	..	..	..	..	..
Maddi	215	..	..	..	215	..	..	..	..	..
Miscellaneous	1,150	61,406	60	..	62,616	..	..	..	..	..
Total ..	1,480	61,406	60	..	62,946	..	35,124	..	..	35,124
Total, Vizagapatam ..	2,007	61,546	97	..	63,650	69,210	74,634	..	..	143,844
Gōdāvari, Upper.										
Reserved forests—										
Teak	139	1,449	..	..	1,588	..	..	..	..	..
Maddi	561	..	..	..	561	..	..	..	..	..
Miscellaneous	1,296	3	..	..	1,299	..	..	..	..	..
Total ..	1,996	1,452	..	..	3,448	..	..	..	..	..
Reserved lands—										
Teak	..	37,533	..	..	37,533	..	..	..	..	..
Unreserved lands—										
Teak	892	48,286	..	..	49,178	..	..	..	..	..
Maddi	..	31,221	461	..	31,682	..	..	..	..	..
Yegisi	2	6,282	50	..	6,334	..	..	..	..	..
Miscellaneous	5,564	49,704	2,657	..	57,925	..	..	..	..	..
Total ..	6,458	135,493	3,168	..	145,119	2,144	43,796	..	..	45,940
Total, Gōdāvari, Upper ..	8,454	174,478	3,168	..	186,100	2,144	43,796	..	..	45,940
Gōdāvari, Lower.										
Reserved forests—										
Teak	3,280	..	..	..	3,280	..	..	..	..	..
Maddi	623	..	..	..	623	..	..	..	..	..
Yegisi	365	..	..	..	365	..	..	..	..	..
Miscellaneous	3,930	632	..	..	4,562	..	..	..	..	..
Total ..	8,198	632	..	..	8,830	150,283	8,050	..	..	158,333
Unreserved lands—										
Teak	..	9	..	..	9	..	..	..	..	..
Maddi	..	17,799	..	..	17,799	..	..	..	..	..
Yegisi	..	27,130	..	..	27,130	..	..	..	..	..
Miscellaneous	445	217,266	..	..	217,711	..	..	..	..	..
Total ..	445	262,204	..	..	262,649	7,692	242,247	..	..	249,939
Total, Gōdāvari, Lower ..	8,643	262,836	..	..	271,479	157,975	250,297	..	..	408,272

(*a*) Excludes 3,197 c. ft. belonging to the Parlakimedi Maliahs.
(*b*) Do. 4,213 do. do.
(*c*) Do. 800 do. do.
(*d*) Do. 8,210 do. do.
(*e*) Do. 43,462 do. do

FORM No. 76.

Madras Presidency.

(in number) during the year 1912-13, and Agency of Exploitation.

Total.	Bamboos.									
Outturn.	Government.		Purchasers.		Free-grantees.		Right-holders.		Total.	
	Number.	Value in Rs.	Number.	Value in Rs.	Number.	Value in Rs.	Number.	Value in Rs.	Number.	Value in Rs.
12	13		14		15		16		17	
C. FT.										
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
124,763	595,723	4,991	342,308	1,607	26,640	177	..	..	964,671	6,775
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
900,768	150	1	146,840	825	14,360	88	..	..	161,350	914
(*f*)1,025,531	(*g*) 595,873	4,992	(*h*) 489,148	2,432	(*i*) 41,000	265	..	..	(*j*)1,126,021	7,689
109,424	833,837	12,625	394,798	3,482	300	2	..	..	1,228,935	16,109
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
98,070	640	12	56,110	563	..	..	..	..	56,750	575
* 207,494	834,477	12,637	450,908	4,045	300	2	..	..	1,285,685	16,684
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
3,448	1,000	5	1,036,225	6,914	..	..	..	..	1,037,225	6,919
37,533	..	..	27,900	279	..	..	..	..	27,900	279
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
191,059	..	..	408,800	2,044	..	..	..	..	408,800	2,044
232,040	1,000	5	1,472,925	9,237	..	..	..	..	1,473,925	9,242
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
167,163	8,664	43	8,680	69	..	..	..	..	17,344	112
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
512,583	4,940	25	6,897,437	35,852	..	..	..	..	6,902,377	35,877
679,751	13,604	68	6,906,117	35,921	..	..	..	..	6,919,721	35,989

(*f*) Excludes 51,672 c. ft. belonging to the Parlakimedi Maliahs.
(*g*) Do. 57,613 bamboos do. do.
(*h*) Do. 15,957 do. do.
(*i*) Do. 2,000 do. do.
(*j*) Do. 75,570 do. do. , but erroneously entered in the District return as 97,528.

* Corrected in the Board's office.

Outturn (in cubic feet solid) of Timber, Fuel and Bamboos

District.	Timber.					Fuel.				
	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.
1	2	3	4	5	6	7	8	9	10	11
NORTHERN CIRCLE—*cont.*	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.
Kistna.										
Reserved forests—										
Miscellaneous	2,216	40,378	..	..	42,594	80,503	1,888,717	..	..	1,969,220
Unreserved lands—										
Miscellaneous	1,173	136,168	4,320	..	141,661	..	56,874	..	..	56,874
Total, Kistna ..	3,389	176,546	4,320	..	184,255	80,503	1,945,591	..	..	2,026,094
Kurnool, East.										
Reserved forests—										
Teak	2,325	..	..	..	2,325	..	..	..	..	..
Yegisi	9,712	4	..	..	9,716	..	..	..	..	..
Yepi	335	1	..	..	336	..	..	..	..	..
Miscellaneous	4,794	89	..	..	4,883	..	..	..	..	..
Total ..	17,166	94	..	..	17,260	2,800	..	..	..	2,800
Unreserved lands—										
Miscellaneous	..	28,260	..	..	28,260	..	1,762	..	..	1,762
Total, Kurnool, East ..	17,166	28,354	..	..	45,520	2,800	1,762	..	..	4,562
Kurnool, South.										
Reserved forests—										
Teak	2,756	..	..	..	2,756	..	..	..	..	..
Maddi	4,158	..	..	..	4,158	..	..	..	..	..
Yegisi	2,207	..	..	..	2,207	..	..	..	..	..
Yepi	135	..	..	..	135	..	..	..	..	..
Miscellaneous	30,031	18,710	600	20	49,361	..	..	..	..	..
Total ..	39,287	18,710	600	20	58,617	648,027	40,440	..	300	688,767
Unreserved lands—										
Miscellaneous	..	27,490	1,670	..	29,160	..	93,890	..	..	93,890
Total, Kurnool, South ..	39,287	46,200	2,270	20	87,777	648,027	134,330	..	300	(*a*)782,657
Kurnool, West.										
Reserved forests—										
Teak	4,139	..	..	..	4,139	..	..	..	..	..
Yegisi	6,460	..	..	..	6,460	..	..	..	..	..
Maddi	8,615	..	..	..	8,615	..	..	..	..	..
Miscellaneous	185,343	3,661	678	787	190,469	..	..	..	..	..
Total ..	204,557	3,661	678	787	209,683	458,911	1,110	..	154,596	614,527
Unreserved lands—										
Miscellaneous	..	2,820	..	..	2,820	..	114,080	..	..	114,080
Total, Kurnool, West ..	204,557	(*a*) 6,481	678	787	212,503	458,911	115,190	..	154,596	728,607
										Abs
Reserved forests—										
Sal (*Shorea robusta*)	14,847	44,090	..	..	58,937	..	..	..	..	..
Teak (*Tectona grandis*) ..	12,639	1,449	..	..	14,088	..	..	..	..	..
Yegisi (*Pterocarpus Marsupium*).	18,744	4	..	..	18,748	..	..	..	..	..
Yepi (*Hardwickia binata*) ..	470	1	..	..	471	..	..	..	..	..
Maddi (*Terminalia tomentosa*).	13,957	..	..	..	13,957	..	..	..	..	..
Miscellaneous	236,959	66,219	10,235	807	314,250	..	..	..	..	..
Total, Northern Circle ..	297,616	111,793	10,235	807	420,451	1,449,682	1,983,327	..	154,896	3,587,815
Reserved lands—										
Teak	..	37,533	..	..	37,533	..	..	..	..	..
Unreserved lands—										
Sal (*Shorea robusta*)	11,282	24,211	..	..	35,493	..	..	..	..	..
Teak (*Tectona grandis*)	892	48,295	..	..	49,187	..	..	..	..	..
Yegisi (*Pterocarpus Marsupium*).	117	33,412	50	..	33,579	..	..	..	..	..
Maddi (*Terminalia tomentosa*) ..	215	49,020	461	..	49,696	..	..	..	..	..
Miscellaneous	13,644	958,447	11,897	..	983,988	..	..	..	..	..
Total, Northern Circle ..	26,150	1,113,385	12,408	..	1,151,943	10,462	1,008,587	..	..	1,019,049

(*a*) Corrected in the Board's office.

(in number) during the year 1912–13, and Agency of Exploitation—*cont.*

Total.	Bamboos.									
Outturn.	Government.		Purchasers.		Free-grantees.		Right-holders		Total.	
12	13		14		15		16		17	
C. FT.	NO.	RS.	NO.	RS.	NO.	RS.	NO.	RS.	NO.	RS.
2,011,814	29,075	273	29,375	344	..	..	..	..	58,450	617
198,535	..	..	..	..	..	..	..	..	..	..
2,210,349	29,075	273	29,375	344	..	..	..	..	58,450	617
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..		..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
20,060	726	7	31,470	315	5,370	54	..	..	37,566	376
30,022	..	..	..	..	..	..	..	..	..	..
50,082	726	7	31,470	315	5,370	54	..	..	37,566	376
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
747,384	204,364	2,424	567,603	7,060	700	18	..	..	772,667	9,502
123,050	..	..	..	..	..	..	..	..	..	..
870,434	204,364	2,424	567,603	7,060	700	18	..	..	772,667	9,502
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
824,210	2,367,618	24,581	721,268	12,189	300	3	12,293	61	3,101,479	36,834
116,900	..	..	..	..	..	..	..	..	..	..
941,110	2,367,618	24,581	721,268	12,189	300	3	12,293	61	3,101,479	36,834
tract.										
..	..	..	..	..	..	..	..	..	..	..
..	..	..		..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
4,008,266	4,041,007	44,949	3,131,727	31,980	33,310	254	12,293	61	7,218,337	77,244
37,533	..	..	27,900	279	..	..	..	..	27,900	279
.	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
2,170,992	5,730	38	7,509,187	39,284	14,360	88	..	..	7,529,277	39,410

Outturn (in cubic feet solid) of Timber, Fuel and Bamboos

District.	Timber.					Fuel.				
	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.
1	2	3	4	5	6	7	8	9	10	11
NORTHERN CIRCLE—*cont.*										
Reserved forests, reserved lands and unreserved lands—	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.		C. FT.
Sal (*Shorea robusta*)	26,129	68,301	..	..	94,430	..	..	..	..	..
Teak (*Tectona grandis*) ..	13,531	87,277	..	..	100,808	..	..	..	..	..
Yegisi (*Pterocarpus Marsupium*)	18,861	33,416	50	..	52,327	..	..	..	..	.
Yepi (*Hardwickia binata*) ..	470	1	..	..	471	..	..	..	..	..
Maddi (*Terminalia tomentosa*)	14,172	49,020	461	..	63,653	..	..	..	..	..
Miscellaneous	250,603	1,024,696	22,132	807	1,298,238	..	..	..	..	..
Grand Total N.C. ..	323,766	(*a*)1,262,711	22,643	807	(*a*)1,609,927	1,460,144	2,991,914	..	154,806	4,606,864
CENTRAL CIRCLE.										
Bellary.										
Reserved forests—										
Miscellaneous	4,149	3,344	..	..	7,493	10,283	154,400	..	..	164,683
Leased forests—										
Sandalwood (*Santalum album*).	294	..	..	..	294	..	..	..	..	..
Miscellaneous	..	..	..	..	..	4,850	107,050	..	..	111,900
Unreserved lands—										
Miscellaneous	492	52,372	..	..	52,864	..	140,529	..	..	140,529
Total, Bellary ..	4,935	55,716	..		60,651	15,133	401,979	..	..	417,112
Anantapur.										
Reserved forests—										
Miscellaneous	320	600	4,680	..	5,600	36,985	24,615	..	..	61,600
Unreserved lands—										
Miscellaneous	..	461,100	4,342	..	465,442	6,975	191,958	..	..	198,933
Total, Anantapur ..	320	461,700	9,022	..	471,042	43,960	216,573	..	..	260,533
Guntūr.										
Reserved forests—										
Miscellaneous	17,948	17,728	1,008	..	36,684	635,040	261,184	.	..	896,224
Unreserved lands—										
Miscellaneous	880	428,416	24,864	..	454,160	58,310	10,816	..	..	69,126
Total, Guntūr ..	18,828	446,144	25,872	..	490,844	693,350	272,000	..	..	965,350
Cuddapah, North.										
Reserved forests—										
Miscellaneous	5,209	..	1,240	..	6,449	59,700	2,926	..	..	62,626
Unreserved lands—										
Miscellaneous	..	44,589	200	..	44,789	..	224,369	..	..	224,369
Total, Cuddapah, North ..	5,209	44,589	1,440	..	51,238	59,700	227,295	..	..	286,995
Cuddapah, East.										
eserved forests—										
Miscellaneous	34,013	435	3,800	..	38,248	293,100	1,405,317	..	..	1,698,417
nreserved lands—										
Miscellaneous	..	10,330	..	..	10,330	..	28,288	..	..	28,288
Total, Cuddapah, East ..	34,013	10,765	3,800	..	48,578	293,100	1,433,605	..	..	1,726,705
Nellore.										
served forests—										
Miscellaneous	380	4,710	2,800	..	7,890	26,622	960,271	20	..	986,918
reserved lands—										
Miscellaneous	533	84,369	6,422	..	91,324	430	51,232	..	..	51,662
Total, Nellore ..	913	89,079	9,222	..	99,214	27,052	1,011,503	20	..	1,038,575

(*a*) Corrected in the Board's office.

(in number) during the year 1912–13, and Agency of Exploitation—*cont.*

Total.	Bamboos.									
Outturn.	Government.		Purchasers.		Free-grantees.		Right-holders.		Total.	
	Number.	Value in Rs.	Number.	Value in Rs.	Number.	Value in Rs.	Number.	Value in Rs.	Number.	Value in Rs.
12	13		14		15		16		17	
tract—cont.										
C. FT.	NO.	RS.	NO.	RS.	NO.	RS.	NO.	RS.	NO.	RS.
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
6,179,258	4,046,737	44,987	10,668,814	71,543	47,670	342	12,293	61	14,775,514	1,16,933
172,176	150	3	5,160	45	..	..	..	..	5,310	48
294	..	..	..	..	..	..	..	..	..	..
111,900	6650	301	31,736	1,655	..	..	..	..	38,386	1,956
193,393	..	..	560	5	..	..	..	..	560	5
477,763	6,800	304	37,456	1,705	..	..	..	..	44,256	2,009
67,200	3,925	259	..	..	..	..	..	..	3,925	259
664,375	..	..	..	..	..	..	..	..	..	..
731,575	3,925	259	..	..	..	..	..	..	3,925	259
932,908	..	..	..	..	..	..	..	..	..	..
523,286	..	..	160	10	..	..	..	..	160	10
1,456,194	..	..	160	10	..	..	..	..	160	10
69,075	380	28	10	..	5,900	74	..	..	6,290	102
269,158	..	..	..	..	..	..	..	..	..	..
338,233	380	28	10	..	5,900	74	..	..	6,290	102
1,736,665	440	3	774,310	6,188	18,100	255	..	..	792,850	6,446
38,618	..	..	..	..	..	..	..	..	..	..
1,775,283	440	3	774,310	6,188	18,100	255	..	..	792,850	6,446
994,803	12	1	..	..	..	..	..	..	12	1
142,986	..	..	2,412	13	..	..	..	..	2,412	13
1,137,789	12	1	2,412	13	..	..	..	..	2,424	14

Outturn (in cubic feet solid) of Timber, Fuel and Bamboos

District.	Timber.					Fuel.				
	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free-grantees.	Right-holders	Total.
1	2	3	4	5	6	7	8	9	10	11
CENTRAL CIRCLE—*cont.*	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT	C. FT.
Chingleput.										
Reserved forests—										
Miscellaneous	4	..	..	..	4	1,745	126,496	..	..	128,241
Unreserved lands—										
Miscellaneous	..	211,736	1,840	..	213,576	..	85,392	..	..	85,392
Total, Chingleput ..	4	211,736	1,840	..	213,580	1,745	211,888	..	..	213,633
Chittoor.										
Reserved forests—										
Red sanders (*Pterocarpus santalinus*).	1,030	..	..	..	..	..	..	..	..	..
Sandalwood (*Santalum album*).	3	..	..	..	..	..	..	..	..	..
Miscellaneous	1,756	..	..	..	..	..	..	..	..	..
Total ..	2,789	..	127	..	2,916	283,846	264,557	..	..	548,403
Unreserved lands—										
Miscellaneous	..	62,284	6,794	..	69,078	..	161,828	..	..	161,828
Total, Chittoor ..	2,789	62,284	6,921	..	71,994	283,846	426,385	..	..	710,231
										Abs
Reserved and leased forests—										
Red sanders (*Pterocarpus santalinus*).	1,030	..	..	..	..	..	..	..	..	..
Sandalwood (*Santalum album*).	297	..	..	..	..	..	..	..	..	..
Miscellaneous	63,779	..	..	..	..	..	..	..	..	..
Total C.C. ..	65,106	26,817	13,655	..	105,578	1,352,171	3,306,816	20	..	4,659,007
Unreserved lands—										
Miscellaneous	1,905	1,355,196	44,462	..	1,401,563	65,715	894,412	..	..	960,127
Grand total C.C. ..	67,011	1,382,013	58,117	..	1,507,141	1,417,886	4,201,228	20	..	5,619,134
SOUTHERN CIRCLE.										
Vellore, North.										
Reserved forests—										
Miscellaneous	27	13,424	38	..	13,489	5,304	496,723	..	..	502,027
Unreserved lands—										
Miscellaneous	..	21,670	8,985	..	30,655	..	59,760	..	..	59,760
Total, Vellore, North .	27	35,094	9,023	..	44,144	5,304	556,483	..	..	561,787
Vellore, South.										
Reserved forests—										
Sandalwood (*Santalum album*).	7,572	..	..	..	7,572	..	..	..	..	..
Miscellaneous	205	245	..	..	450	..	..	..	..	..
Total ..	7,777	245	..	..	8,022	480	217,961	..	..	218,441
Unreserved lands—										
Miscellaneous	.	143,838	4,700	..	148,538	..	87,099	..	..	87,099
Total, Vellore, South ..	7,777	144,083	4,700	..	156,560	480	305,060	..	..	305,540
Arcot, South.										
Reserved forests—										
Miscellaneous	3	148	..	..	151	204,685	396,243	800	..	601,728
Unreserved lands—										
Miscellaneous	340	175,647	9,705	..	185,692	20	199,970	..	..	199,990
Total, Arcot, South ..	343	175,795	9,705	..	185,843	204,705	596,213	800	..	801,718

(in number) during the year 1912–13, and Agency of Exploitation—*cont.*

Total.	Bamboos.									
Outturn.	Government.		Purchasers.		Free-grantees.		Right-holders.		Total.	
	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.
12	13		14		15		16		17	
C. FT.										
128,245	..	..	..	..	..	..	..	..	..	..
298,968	..	..	558	35	78	10	..	..	636	45
427,213	..	..	558	35	78	10	..	..	636	45
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
551,319	76,781	480	866,316	3,992	800	5	..	..	943,897	4,477
230,906	..	..	..	.	72	1	..	..	72	1
782,225	76,781	480	866,316	3,992	872	6	..	..	943,969	4,478
tract.										
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
4,764,585	88,338	1,075	1,677,532	11,880	24,800	334	..	..	1,790,670	13,289
2,361,690	..	..	3,690	63	150	11	..	..	3,840	74
7,126,275	88,338	1,075	1,681,222	11,943	24,950	345	..	..	1,794,510	13,363
515,516	..	..	233,584	3,503	..	..	..	..	233,584	3,503
90,415	..	..	..	..	..	..	..	..	..	..
605,931	..	..	233,584	3,503	..	..	..	..	233,584	3,503
.	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
226,463	..	..	4,299,033	35,788	..	..	..	..	4,299,033	35,788
235,637	..	..	132,008	800	9,916	79	..	..	141,924	879
462,100	..	..	4,431,041	36,588	9,916	79	..	..	4,440,957	36,667
601,879	1,440	156	31,366	270	..	..	..	..	32,806	426
385,682	..	..	488	45	..	..	..	..	488	45
987,561	1,440	156	31,854	315	..	..	..	..	33,294	471

Outturn (in cubic feet solid) of Timber, Fuel and Bamboos

District.	Timber.					Fuel.				
	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.
1	2	3	4	5	6	7	8	9.	10	11
SOUTHERN CIRCLE—*cont.*	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.
Salem, North.										
Reserved forests—										
Sandalwood (*Santalum album*).	603	..	..	..	603	..	..	..	..	..
Miscellaneous	2,437	504	..	..	2,941	..	..	..	..	..
Total ..	3,040	504	..	..	3,544	1,766	224,978	..	..	226,744
Unreserved lands—										
Miscellaneous	2,848	115,142	966	..	118,956	138	101,135	..	..	101,273
Total, Salem, North ..	5,888	115,646	966	..	122,500	1,904	326,113		..	328,017
Salem, South.										
Reserved forests—										
Sandalwood (*Santalum album*).	88	..	..	..	88	..	..	..	..	..
Miscellaneous	690	81	1,590	..	2,361	..	..	..	..	..
Total ..	778	81	1,590	..	2,449	1,128	466,625	..	..	467,753
Unreserved lands—										
Sandalwood (*Santalum album*).	209	..	..	..	209	..	..	..	..	..
Miscellaneous	381	144,869	..	..	145,250	..	..	..	..	..
Total ..	590	144,869	..	..	145,459	2,332	178,032	..	..	180,364
Total, Salem, South ..	1,368	144,950	1,590	..	147,908	3,460	644,657	..	..	648,117
Trichinopoly.										
Reserved forests—										
Sandalwood (*Santalum album*).	2	..	..		2	..	..	..	..	..
Miscellaneous	562	1,212	..	..	1,774	..	..	..	..	..
				..						
Total ..	564	1,212	..	..	1,776	40,150	811,803	103,361	..	955 314
Unreserved lands—										
Miscellaneous	..	195,909	4,855	..	200,764	53,555	1,107,835	..	..	1,161,390
Total, Trichinopoly ..	564	197,121	4,855	..	202,540	93,705	1,919,638	103,361	..	2,116,704
Madura.										
Reserved forests —										
Teak (*Tectona grandis*) ..	198	..	..	..	198	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	71	..	..	..	71	..	..	..	..	..
Pterocarpus Marsupium ..	261	..	..	..	261	..	..	..	..	..
Miscellaneous	495	44,271	1,437	..	46,203	..	..	..	..	..
Total ..	1,025	44,271	1,437	..	46,733	326	804,386	..	..	804,712
Unreserved lands—										
Miscellaneous	3,031	100,864	..	..	103,895	35,678	463,691	140	20	499,529
Total, Madura ..	4,056	145,135	1,437	..	150,628	36,004	1,268,077	140	20	1,304,241
Tinnevelly.										
Reserved forests—										
Miscellaneous	12,512	1,742	..	..	14,254	8,486	502,023	..	..	510,509
Unreserved lands—										
Miscellaneous	..	23,663	..	..	23,663	..	141,101	..	..	141,101
Total, Tinnevelly ..	12,512	25,405	..	..	37,917	8,486	643,124	..	..	651,610

(in number) during the year 1912-13, and Ageney of Exploitation—*cont.*

Total.	Bamboos.									
Outturn.	Government.		Purchasers.		Free-grantees.		Right-holders.		Total.	
	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.
12	13		14		15		16		17	
C. FT.										
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
230,288	162	31	3,260,148	6,570	..	..	..	..	3,260,310	6,601
220,229	1,923	222	116,945	3,285	445	4	..	..	119,313	3,511
450,517	2,085	253	3,377,093	9,855	445	4	..	..	3,379,623	10,112
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
470,202	..	..	4,222,351	26,390	15,660	98	..	..	4,238,011	26,488
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
325,822	380	2	159,175	995	..	..	..	..	159,555	997
796,025	380	2	4,381,526	27,385	15,660	98	..	..	4,397,566	27,485
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
957,090	23	6	61,193	2,225	360	45	..	..	61,576	2,276
1,362,154	..	..	533	167	60	6	..	..	593	173
2,319,244	23	6	61,726	2,392	420	51	..	..	62,169	2,449
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
851,445	287	2	114,508	5,404	..	..	..	..	114,795	5,406
603,424	..	..	..	..	..	..	..	..	..	..
1,454,869	287	2	114,508	5,404	..	..	..	..	114,795	5,406
524,763	67	4	28,060	108	..	..	..	..	28,127	112
164,764	..	..	1,500	4	..	..	..	..	1,500	4
689,527	67	4	29,560	112	..	..	..	..	29,627	116

Outturn (in cubic feet solid) of Timber, Fuel and Bamboos

District.	Timber.					Fuel.				
	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.
1	2	3	4	5	6	7	8	9	10	11
SOUTHERN CIRCLE—*cont.*	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.
										Abs
Reserved forests—										
Sandalwood (*Santalum album*).	8,265	..	..	..	8,265	..	..	..	..	..
Teak (*Tectona grandis*) ..	198	..	..	..	198	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	71	..	..	..	71	..	..	..	..	..
Pterocarpus Marsupium ..	261	..	..	..	261	..	..	..	..	..
Miscellaneous	16,931	61,627	3,065	..	81,623	..	..	..	..	..
Total S.C ..	25,726	61,627	3,065	..	90,418	262,325	3,920,742	104,161	..	4,287,228
Unreserved lands—										
Sandalwood (*Santalum album*).	209	..	..	..	209	..	..	..	..	..
Miscellaneous	6,600	921,602	29,211	..	957,413	..	..	..	..	..
Total S.C. ..	6,809	921,602	29,211	..	957,622	91,723	2,338,623	140	20	2,430,506
Total, Reserved forests and unreserved lands, S.C.	32,535	983,229	32,276	..	1,048,040	354,048	6,259,365	104,301	20	6,717,734
WESTERN CIRCLE.										
South Canara.										
Reserved forests—										
Teak (*Tectona grandis*) ..	666	..	..	..	666	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	309	100	..	..	409	..	..	..	..	..
Pterocarpus Marsupium ..	106	..	..	..	106	..	..	..	..	..
Ironwood (*Xylia dolabriformis*)	1,919	..	..	..	1,919	..	..	..	..	..
Hopea parviflora	122	400	..	..	522	..	..	..	..	..
Miscellaneous	7,235	796	..	..	8,031	..	..	..	.	..
Total ..	10,357	1,296	..	..	11,653	528,200	663,327	..	..	1,191,527
Reserved lands—*Nil.*										
Unreserved lands—										
Teak (*Tectona grandis*) .	..	1,150	..	1,300	2,450	..	..	..	..	..
Sandalwood (*Santalum album*).	..	218	..	..	218	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	..	1,254	75	425	1,754	..	..	..	..	..
Pterocarpus Marsupium ..	..	125	..	425	550	..	..	..	..	..
Ironwood (*Xylia dolabriformis*).	..	915	..	625	1,540	..	..	..	..	..
Hopea parviflora	..	6,847	1,000	16,150	23,997	..	..	..	..	..
Ebony (*Diospyros Ebenum*) ..	..	2,175	..	..	2,175	..	..	..	..	..
Miscellaneous	..	53,920	325	14,125	68,370	..	..	..	..	..
Total ..	..	66,604	1,400	33,050	101,054	..	319,157	..	..	319,157
Total, South Canara ..	10,357	67,900	1,400	33,050	112,707	528,200	982,484	..	..	1,510,684
Malabar, North.										
Reserved forests—										
Teak (*Tectona grandis*) ..	23,663	24,386	..	..	48,049	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	6,466	8,842	..	..	15,308	..	..	..	..	..
Pterocarpus Marsupium ..	7,247	2,399	..	..	9,646	..	..	..	..	..
Lagerstrœmia microcarpa ..	7,658	1,512	..	..	9,170	..	..	..	..	..
Terminalia tomentosa ..	17,771	7,715	..	..	25,486	..	..	..	..	..
Miscellaneous	4,673	3,335	..	..	8,008	..	..	..	..	..
Total ..	67,478	48,189	..	..	116,667	11,901	12	..	..	11,913
Reserved lands—*Nil.*										
Unreserved lands—*Nil.*										
Total, Malabar, North ..	67,478	48,189	..	..	115,667	11,901	12	..	..	11,913
Malabar, South.										
Reserved forests—										
Teak (*Tectona grandis*) ..	13,565	..	.	..	13,565	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	166	..	..	..	166	..	..	..	..	..
Ironwood (*Xylia dolabriformis*).	3,526	..	..	..	3,526	..	..	..	.	..
Terminalia tomentosa	505	..	..	..	505	..	..	..	..	..
Miscellaneous	5,485	40	..	..	5,525	..	..	..	..	..
Total ..	23,247	40	..	..	23,287	141	231	..	..	372

(in number) during the year 1912–13, and Agency of Exploitation—*cont.*

Total.	Bamboos.									
Outturn.	Government.		Purchasers.		Free-grantees.		Right-holders.		Total.	
	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.
12	13		14		15		16		17	
C. FT.										
tract.										
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
4,377,646	1,979	199	12,250,243	80,258	16,020	143	..	..	12,268,242	80,600
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
3,388,128	2,303	224	410,649	5,296	10,421	89	..	..	423,373	5,609
7,765,774	4,282	423	12,660,892	85,554	26,441	232	..	..	12,691,615	86,209
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
1,203,180	23,273	2,095	83,950	1,658	200	4	..	..	107,423	3,757
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
420,211	.	..	22,330	357	..	..	..	..	22,330	357
1,623,391	23,273	2,095	106,280	2,015	200	4		..	129,753	4,114
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..		..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
127,580	20,745	1,035	22,443	336	5,000	50	..	..	48,188	1,421
127,580	20,745	1,035	22,443	336	5,000	50	..	..	48,188	1,421
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
23,659	25,718	1,543	22,200	484	..	..	..	..	47,918	2,027

Outturn (in cubic feet solid) of Timber, Fuel and Bamboos

District.	Timber.					Fuel.				
	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.
1	2	3	4	5	6	7	8	9	10	11
WESTERN CIRCLE—*cont.*	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.
Malabar, South—cont.										
Reserved lands—										
Miscellaneous	852	..	..	..	852	..	..		..	..
Unreserved lands—										
Teak (*Tectona grandis*) ..	206	9		..	215	..	..		..	..
Miscellaneous	..	223	..	..	223	..	..	..	..	..
Total ..	206	232	..	..	438	..	40	..	..	40
Leased forests—										
Teak (*Tectona grandis*) ..	56,652	..	..	..	56,652	..	..	..	.	..
Ironwood (*Xylia dolabriformis*).	12	276	..	..	288	..	..	..	..	..
Terminalia tomentosa	40	..	..	..	40	..	..		..	..
Miscellaneous	88	59	..	..	147	..	..	..	..	..
Total ..	56,792	335	..		57,127	3,626	..	..	..	3,626
Total, Malabar, South ..	81,097	607	..	..	81,704	3,767	271	..	..	4,038
The Nilgiris.										
Reserved forests—										
Teak (*Tectona grandis*) ..	..	278	..	..	278	..	..	..	..	..
Pterocarpus Marsupium ..	..	95	..	..	95	..	..		..	..
Rosewood (*Dalbergia latifolia*).	..	27		..	27	..	..	..	..	..
Sandalwood (*Santalum album*)..	276	..	..	..	276	..	..	..	..	..
Miscellaneous	..	8,566	200		8,766	..		..	..	..
Total ..	276	8,966	200	..	9,442	349,299	2,223	975	..	352,497
Reserved lands—										
Miscellaneous	..	..	..	336	336	..	..	..	28	28
Unreserved lands—*Nil.*										
Leased forests—										
Teak (*Tectona grandis*) .	28,558	..	..	..	28,558	..	..	..	..	..
Pterocarpus Marsupium ..	1,440	..	..	..	1,440	.	..	..	..	..
Lagerstræmia microcarpa ..	425	..	..	..	425	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	633	..	..	..	633	..	..	..	..	..
Miscellaneous	97	1,352	117	..	1,566	..		..	..	..
Total ..	31,153	1,352	117	..	32,622	..	.	..	..	..
Total, the Nilgiris ..	31,429	10,318	317	336	42,400	349,299	2,,223	975	28	352,525
Kollegal.										
Reserved forests—										
Teak (*Tectona grandis*) ..	53	..	..	..	53	.	..	..	..	..
Sandalwood (*Santalum album*)..	1,358	..	..	..	1,358	..	..	..	..	..
Miscellaneous	2,129	..	..	..	2,129	..	..		..	..
Total ..	3,540	..	..	..	3,540	318,240	1,710	..	..	319,950
Reserved lands—										
Sandalwood (*Santalum album*).	678	..	..	..	678	..	..	..	..	..
Unreserved lands—										
Miscellaneous	25	29,504	..	..	29,529	..	3,785	..	..	3,785
Total, Kollegal ..	4,243	29,504	..	..	33,747	318,240	5,495	..	..	323,735
Coimbatore, North.										
Reserved forests—										
Sandalwood (*Santalum album*)..	3,348	..	..	..	3,348	..	..	..	..	..
Teak (*Tectona grandis*) ..	35	..	..	..	35	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	285	..	..	..	285	..	..	..	..	..
Miscellaneous	7,511	494	..	..	8,005	..	..	..	..	..
Total ..	11,179	494	..	..	11,673	652,789	764	..	.	653,553
Reserved lands—*Nil.*										
Unreserved lands—										
Miscellaneous	..	10,301	137	..	10,438	..	10,191	..	..	10,191
Total, Coimbatore, North ..	11,179	10,795	137	..	22,111	652,789	10,955	..	..	663,744

(in number) during the year 1912–13, and Agency of Exploitation—*cont.*

Total.	Bamboos.									
Outturn.	Government.		Purchasers.		Free-grantees.		Right-holders.		Total.	
	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.
12	13		14		15		16		17	
C. FT.										
852	..	..	..	..	..	..	..	..	..	..
..	..		..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
478	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..		..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
60,753	36,816	1,909	12,536	273	..	..	..	..	49,352	2,182
85,742	62,534	3,452	34,736	757	..	..	..	..	97,270	4,209
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..		..	..	..	..	..	..
361,939	..	..	334,271	2,973	1,610	15	..	..	335,881	2,988
364	..	..	..	..	..	..	1,392	4	1,392	4
..	..	..	..	..	..	..		..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
32,622	..	..	1,981	20	2,235	22	..	..	4,216	42
394,925	..		336,252	2,993	3,845	37	1,392	4	341,489	3,034
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
323,490	98,081	2,139	139,864	515	..	..	..	..	237,945	2,654
678	..	..	18,422	135	..	..	..	..	18,422	135
33,314	..	..	..	..	..	..	..	..	..	..
357,482	98,081	2,139	158,286	650	..	..	..	..	256,367	2,789
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
665,226	1,865	25	3,500,418	6,866	..	..	..	..	3,502,283	6,891
20,629	..	..	..	..	..	..	..	..	..	..
685,855	1,865	25	3,500,418	6,866	..	..	..	..	3,502,283	6,891

Outturn (in cubic feet solid) of Timber, Fuel and Bamboo

District.	Timber.					Fuel.				
	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.
1	2	3	4	5	6	7	8	9	10	11
WESTERN CIRCLE—*cont.*										
Coimbatore, Central.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.
Reserved forests—										
Teak (*Tectona grandis*)	97	..	..	..	97	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	84	..	..	..	84	..	..	..	..	..
Pterocarpus Marsupium ..	467	..	..	..	467	..	..	..	..	..
Terminalia tomentosa	10	..	..	..	10	..	..	..	..	..
Miscellaneous	98	19,012	..	..	19,110	..	..	..	..	..
Total ..	756	19,012	..	..	19,768	109,677	756,521	..	..	866,198
Reserved lands—*Nil.*										
Unreserved lands—										
Miscellaneous	..	108,973	4,048	..	113,021	..	123,179	..	..	123,179
Total, Coimbatore, Central ..	756	127,985	4,048	..	132,789	109,677	879,700	..	..	989,377
Coimbatore, South.										
Reserved forests—										
Teak (*Tectona grandis*) ..	24,539	..	..	..	24,539	..	..	..	..	..
Ironwood (*Xylia dolabriformis*).	813	..	..	..	813	..	..	..	..	..
Pterocarpus Marsupium ..	3,812	..	..	..	3,812	..	..			..
Rosewood (*Dalbergia latifolia*).	12,081	..	..	..	12,081	..	..	..	..	..
Terminalia tomentosa	10,430	..	..	..	10,430	..	..	..	..	..
Lagerstrœmia microcarpa ..	4,161	..	..	..	4,161	..	..	..	..	..
Miscellaneous	24,552	5,370	..	..	29,922	..	..	..	..	..
Total ..	80,388	5,370	..	..	85,758	97,800	187,380	..	..	285,180
Reserved lands—*Nil.*										
Unreserved lands—										
Miscellaneous	..	120	160	..	280	..	..	..	..	..
Total, Coimbatore, South ..	80,388	5,490	160	..	86,038	97,800	187,380	..	..	285,180
Reserved forests—										*Ab*
Teak (*Tectona grandis*) ..	62,618	24,664	..	..	87,282	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	19,391	8,969	..	..	28,360	..	..	..	..	..
Sandalwood (*Santalum album*).	4,982	..	..	..	4,982	..	..	..	..	..
Ironwood (*Xylia dolabriformis*).	6,258	..	..	..	6,258	..	..	..	..	..
Pterocarpus Marsupium ..	11,632	2,494	..	..	14,126	..	..	..	..	..
Terminalia tomentosa	28,716	7,715	..	..	36,431	..	..	..	..	..
Lagerstrœmia microcarpa ..	11,819	1,512	..	..	13,331	..	..	..	..	..
Hopea parviflora	122	400	..	..	522	..	..	..	..	..
Miscellaneous	51,683	37,613	200	..	89,496	..	..	..	..	..
Total W. C. ..	197,221	83,367	200	..	280,788	2,068,047	1,612,168	975	..	3,681,190
Reserved lands—										
Sandalwood (*Santalum album*).	678	..	..	..	678	..	..	..	..	..
Miscellaneous	852	..	..	336	1,188	..	..	..	..	..
Total W. C. ..	1,530	..	..	336	1,866	..	..	..	28	28
Unreserved lands—										
Teak (*Tectona grandis*) ..	206	1,159	..	1,300	2,665	..	..	..	.	..
Rosewood (*Dalbergia latifolia*).	..	1,254	75	425	1,754	..	..	..	..	..
Pterocarpus Marsupium.. ..	..	125	..	425	550	..	..	..	..	..
Ironwood (*Xylia dolabriformis*).	..	915	..	625	1,540	..	..	..	..	..
Hopea parviflora	..	6,847	1,000	16,150	23,997	..	..	..	..	..
Sandalwood (*Santalum album*).	..	218	..	.	218	..	..	..	..	..
Ebony (*Diospyros Ebenum*) ..	..	2,175	..	..	2,175	..	..	..	..	..
Miscellaneous	25	203,041	4,670	14 125	221,861	..	..	..	..	..
Total W. C. ..	231	215,734	5,745	33,050	254,760	..	456,352	..	..	456,352

(in number) during the year 1912-13, and Agency of Exploitation—*cont.*

Total.	Bamboos.									
Outturn.	Government.		Purchasers.		Free-grantees.		Right-holders.		Total.	
	Number.	Value in Rs.	Number.	Value in Rs.	Number.	Value in Rs.	Number.	Value in Rs.	Number.	Value in Rs.
12	13		14		15		16		17	
C. FT.										
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
885,966	300	11	467,298	11,682	..	..	..	..	467,598	11,693
236,200	..	..	..	..	..	..	..	..	..	..
1,122,166	300	11	467,298	11,682	..	..	..	..	467,598	11,693
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
370,938	111	10	193,125	1,385	..	..	..	..	193,236	1,395
280	..	..	..	..	..	..	..	..	..	..
371,218	111	10	193,125	1,385	..	..	..	..	193,236	1,395
tract.										
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
3,961,978	170,093	6,858	4,763,569	25,899	6,810	69	..	..	4,940,472	32,826
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
1,894	..	..	18,422	135	..	..	1,392	4	19,814	139
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
711,112	..	..	22,330	357	..	..	..	..	22,330	357

Outturn (in cubic feet solid) of Timber, Fuel and Bamboos

District.	Timber.					Fuel.				
	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.
1	2	3	4	5	6	7	8	9	10	11
	C. FT.	C. FT.	C. FT.	C.FT.	C. FT.	C. FT.	C. FT.	C. FT,	C.FT.	FT.
Leased forests—										*Abs*
Teak (*Tectona grandis*)	85,210	..	..	..	85,210	..	..	..	..	..
Rosewood (*Dalbergia latifolia*),	633	..	..	..	633	..	..	..	..	..
Ironwood (*Xylia dolabriformis*).	12	276	..	..	288	..	..	..	..	..
Terminalia tomentosa	40	..	..	..	40	..	..	..	..	..
Pterocarpus Marsupium.. ..	1,440	..	..	..	1,440	..	..	..	..	..
Lagerstræmia microcarpa ..	425	..	..	..	425	..	..	..	..	..
Miscellaneous	185	1,411	117	..	1,713	..	..	..	..	..
Total W.C. ..	87,945	1,687	117	..	89,749	3,626	..	..	..	3,626
Reserved forests, reserved lands, unreserved lands and leased forests—										
Teak (*Tectona grandis*)	148,034	25,823	..	1,300	175,157	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	20,024	10,223	75	425	30,747	..	..	..	..	..
Sandalwood (*Santalum album*).	5,660	218	..	..	5,878	..	..	..	..	..
Ironwood (*Xylia dolabriformis*).	6,270	1,191	..	625	8,086	..	..	..	..	..
Pterocarpus Marsupium ..	13,072	2,619	..	425	16,116	..	..	..	..	..
Terminalia tomentosa	28,756	7,715	..	..	36,471	..	..	..	..	..
Lagerstræmia microcarpa ..	12,244	1,512	..	..	13,756	..	..	..	..	..
Hopea parviflora	122	7,247	1,000	16,150	24,519	..	..	..	..	..
Ebony (*Diospyros Ebenum*) ..	..	2,175	..	..	2,175	..	..	..	..	..
Miscellaneous	52,745	242,065	4,987	14,461	314,258	..	..	..	..	..
Grand Total W.C. ..	286,927	300,788	6,062	33,386	627,163	2,071,673	2,068,520	975	28	4,141,196
Total, Presidency, Reserved forests, Reserved lands and Unreserved lands—										
Red Sanders (*Pterocarpus marsupium*).	1,030	..	..	..	1,030	..	..	..	..	..
Sandalwood (*Santalum album*)	14,431	218	..	..	14,649	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	20,095	10,223	75	425	30,818	..	..	..	..	..
Ironwood (*Xylia dolabriformis*).	6,270	1,191	..	625	8,086	..	..	..	..	..
Lagerstroemia microcarpa ..	12,244	1,512	..	..	13,756	..	..	..	..	..
Hopea parviflora	122	7,247	1,000	16,150	24,519	..	..	..	..	..
Ebony (*Diospyros Ebenum*) ..	..	2,175	..	..	2,175	..	..	..	..	..
Sal (*Shorea robusta*) ..	26,129	68,301	..	..	94,430	..	..	..	..	..
Teak (*Tectona grandis*) ..	161,763	113,100	..	1,300	276,163	..	..	..	..	..
Yegisi (*Pterocarpus marsupium*).	32,194	36,035	50	425	68,704	..	..	..	..	..
Yepi (*Hardwickia binata*) ..	470	1	..	..	471	..	..	..	.	..
Maddi (*Terminalia tomentosa*).	42,928	56,735	461	..	100,124	..	..	..	..	..
Miscellaneous	392,563	3,632,003	117,512	15,268	4,157,346	..	..	..	..	..
Grand Total, Presidency, Reserved forests, Reserved lands and Unreserved lands.	710,239	3,928,741	119,098	34,193	4,792,271	5,303,751	15,521,027	105,296	154,854	21,084,928

(in number) during the year 1912–13, and Agency of Exploitation—*cont.*

Total.	Bamboos.									
Outturn.	Government.		Purchasers.		Free-grantees.		Right-holders.		Total.	
	Number.	Value in Rs.	Number.	Value in Rs	Number.	Value. in Rs	Number.	Value in Rs.	Number.	Value in Rs.
12	13		14		15		16		17	
FT. *tract.*										
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
93,375	36,816	1,909	14,517	293	2,235	22	..	..	53,568	2,224
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
4,768,359	206,909	8,767	4,818,838	26,684	9,045	91	1,392	4	5,036,184	35,546
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
25,877,199	4,346,266	55,252	29,829,766	195,724	108,106	1,010	13,685	65	34,297,823	252,051

ANNUAL FORM No. 77.

Forest Department, Madras Presidency.

OUTTURN of Minor Forest Produce during the year 1912–13.

Circles.	Description of produce.	Produce removed or utilized.					
		By Government Agency.		By purchasers.	By free grantees.	By right-holders.	Total
		Quantity.	Value.	Value.	Value.	Value.	Value.
1	2	3	4	5	6	7	8
		MDS.	RS.	RS.	RS.	RS.	RS.
Northern Circle ..	Grazing and fodder grass ..	..	..	(*b*)1,28,898	5	798	(*b*)1,29,701
	Grass (thatch, korai, tharbi, etc.).	62,824	620	304	37	..	961
	Tamarind, soapnuts, galnuts, nux-vomica, sheakoy, etc.	2,365	447	32,668	..	..	33,115
	Horns, honey, wax, resin, gum, skins, etc.	253	92	1,079	..	..	1,171
	Tangedu, etc., barks and fibres.	..	..	24,905	2	..	24,907
	Stone, gravel, earth, etc. ..	11,816	109	3,133	..	..	3,242
	Leaves for platters	..	..	589	..	..	589
	Date and palmyra leaves, stalks, etc.	..	..	..	18	..	18
	Manure leaves	..	..	9	..	..	9
	Miscellaneous	18,556	9,360	52,129	45	22,784	(*a*) 84,318
	Total ..	95,814	10,628	2,43,714	107	23,582	2,78,031
Central Circle ..	Grazing and fodder grass ..	21,396	4,873	2,60,729	1,327	..	2,66,929
	Grass (thatch) and korai, etc. ..	3,348	50	1,200	33	151	1,434
	Tamarind, soapnuts and gallnuts.	6,984	5,816	22,456	..	..	28,272
	Horns, honey, wax, gums, etc.	126	618	2,140	..	..	2,758
	Tangedu, vembadam, etc. ..	243	429	5,04,108	..	..	5,04,537
	Mica stone, gravel, etc. ..	..	..	40,692	..	..	40,692
	Manure leaves, thorns, etc. ..	..	..	7,416	4	..	7,420
	Date, palmyra leaves, etc. ..	2,776	54	2,888	423	..	3,365
	Miscellaneous including tree-tapping and tree-owners' fees.	21,228	6,196	1,00,125	49	..	1,06,370
	Total ..	56,101	18,036	9,41,754	1,836	151	9,61,777
Southern Circle ..	Grazing and fodder grass ..	3,296	375	2,18,586	* 7,965	..	2,26,926
	Grass (thatch, korai, etc.) ..	..	..	5,864	27	80	5,971
	Tamarind, soapnuts, gallnuts, etc.	..	..	36,180	..	..	36,180
	Horns, honey, wax, gum, etc. ..	8	22	1,007	..	..	1,029
	Avaram, vembadam, etc., barks.	..	..	23,496	..	..	23,496
	Stones, gravel and earth ..	..	..	29,013	..	..	29,013
	Manure leaves, thorns, etc. ..	..	..	32,523	2,251	..	34,774
	Date, palmyra leaves, etc. ..	..	..	1,328	73	..	1,401
	Miscellaneous including tree tapping fees	114	36	1,59,874	..	740	1,60,650
	Total ..	3,418	433	5,07,871	10,316	820	5,19,440
	Reserved forests.						
Western Circle ..	Grass and grazing	1,802	50	48,218	..	..	48,268
	Grass (thatch, korai, etc.) ..	60	1	607	..	..	608
	Dammer, turmeric, pepper, cardamoms, etc.	2	3	5,365	..	..	5,368
	Tamarind, soapnuts, gallnuts, nux-vomica, sheakoy, etc.	6,872	6,960	4,188	..	..	11,148
	Horns, honey, wax, gum, resin, skins, etc.	393	3,915	731	..	..	4,646
	Avaram, vembadam, etc., barks and fibres.	231	58	2,165	..	..	2,223
	Stones, gravel, earth, etc. ..	..	..	1,180	..	..	1,180
	Manure leaves, thorns, etc, ..	..	..	142	..	..	142
	Date and palmyra leaves ..	8	13	166	..	..	179
	Miscellaneous	270	344	1,827	..	..	2,171
	Total ..	9,638	11,344	64,589	..	..	75,933

* Free grazing, Rs. 465 ; free removal of grass, Rs. 7,500.

(*a*) Corrected in the Board's office.

(*b*) Excludes Rs. 8,245-12-3 being value of produce removed by purchasers in the Parlakimedi maliahs.

Outturn of Minor Forest Produce during the year 1912-13—*cont.*

Circles.	Description of produce.	Produce removed or utilized.					
		By Government Agency.		By purchasers.	By free-grantees.	By right-holders.	Total.
		Quantity.	Value.	Value.	Value.	Value.	Value.
1	2	3	4	5	6	7	8
		MDS.	RS.	RS	RS.	RS.	RS.
Western Circle—*cont.*	*Reserved lands.*						
	Grass and grazing	..	..	5,962	..	702	6,664
	Grass (thatch, korai, etc.) ..	..	..	12	..	16	28
	Dammer, turmeric, pepper, cardamoms, etc.	..	..	472	..	..	472
	Tamarind, soapnuts, gallnuts, nux-vomica, sheakoy, etc.	759	880	18	..	..	898
	Horns, honey, wax, gum, resin, skins, etc.	40	259	1	..	..	260
	Stones, gravel, earth, etc. ..	..	..	..	..	..	..
	Miscellaneous	..	..	..	..	3	3
	Total ..	799	1,139	6,465	..	721	8,325
	Leased forests.						
	Grass (thatch, korai), etc. ..	..	..	20	..	..	20
	Horns, honey, wax, gum, resin, skins, etc.	..	..	24	..	..	24
	Stones, gravel, earth, etc. ..	6	33	..	..	..	33
	Total ..	6	33	44	..	..	77
	Unreserved lands.						
	Catechu	1,242	13,131	..	..	..	13,131
	Tamarind, soapnuts, gallnuts, nux-vomica, sheakoy, etc.	..	..	6,315	..	..	6,315
	Avaram, vembadam, etc., barks and fibres.	..	..	1,461	..	..	1,461
	Stones, gravel, earth, etc. ..	..	..	1,616	416	..	2,032
	Date and palmyra leaves ..	..	..	300	1	..	301
	Manure leaves, thorns, etc. ..	..	..	19	..	..	19
	Miscellaneous	..	..	5,416	..	..	5,416
	Total ..	1,242	13,131	15,127	417	..	28,675
	Grand total, W.C. ..	11,685	25,647	86,225	417	721	1,13,010
Total, Presidency.	Grass and grazing	26,494	5,298	6,62,393	9,297	1,500	6,78,488
	Grass (thatch, korai, etc.) ..	66,232	671	8,907	97	247	9,022
	Tamarind, soapnuts, gallnuts, etc.	16,980	14,103	1,01,825	..	..	1,15,928
	Horns, honey, wax, etc. ..	820	4,906	4,982	..	..	9,888
	Tangedu barks, fibres, etc. ..	474	487	5,56,135	2	..	5,56,624
	Stone, gravel	11,822	142	75,634	416	..	76,192
	Dammer, etc.	2	3	5,837	..	..	5,840
	Catechu	1,242	13,131	..	..	..	13,131
	Leaves for platters	..	..	589	..	..	589
	Manure leaves, etc.	..	..	40,109	2,255	..	42,364
	Date and palmyra leaves ..	2,784	67	4,682	515	..	5,264
	Miscellaneous	40,168	15,936	3,19,371	94	23,527	3,58,928
	Grand Total, Presidency ..	167,018	54,744	17,79,564	12,076	25,274	18,72,258

ANNUAL FORM No. 78.

Forest Department, Madras Presidency.

ACCOUNT of timber and other produce cut or collected by Government Agency and brought to depot, sold locally or otherwise disposed of during 1912–13.

District.	Balance at commencement of the year in forest and sale depots.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in forest and sale depots.
1	2	3	4	5	6
TIMBER (CUBIC FEET).					
Northern Circle.					
Ganjām	(*f*) 38,304	40,263	(*f*) 78,567	(*g*) 65,732	(*h*) 12,835
Vizagapatam	9,595	2,007	11,602	10,209	1,393
Gōdāvari, Upper	28,811	8,454	37,265	20,094	17,171
Do. Lower	20,867	8,643	29,510	29,508	2
Kistna	314	3,389	3,703	3,703	..
Kurnool, East	7,972	17,166	25,138	24,292	846
Do. South	32,915	39,287	72,202	58,460	13,742
Do. West	26,317	204,557	230,874	203,464	27,410
Total ..	165,095	323,766	488,861	415,462	73,399
Central Circle.					
Bellary	826	4,935	5,761	4,653	1,108
Anantapur	308	320	628	628	..
Guntūr	3,799	18,828	22,627	18,471	4,156
Cuddapah, North	5,737	5,209	10,946	9,233	1,713
Do. East	4,624	34,013	38,637	31,555	7,082
Nellore	99	913	1,012	667	345
Chingleput	76	4	80	80	..
Chittoor	45	2,789	2,834	2,768	66
Total ..	15,514	67,011	82,525	68,055	14,470
Southern Circle.					
Vellore, North	1,311	27	1,338	1,331	7
Do. South	6,915	7,777	14,692	8,707	5,985
Arcot, South	959	343	1,302	1,302	..
Salem, North	2,276	5,888	8,164	6,924	1,240
Do. South	514 + 5*	1,368	1,887	1,602	285
Trichinopoly	223	564	787	774	13
Madura	12	4,056	4,068	4,041	27
Tinnevelly	2,309	12,512	14,821	9,872	4,949
Total ..	14,524	32,535	47,059	34,553	12,506
Western Circle.					
Canara, South	10,647	10,357	21,004	12,176 (*a*) 435 (*b*) 27	8,366
Malabar, North	17,984	67,478	85,462	54,916 (*a*) 1,053 (*b*) 3,677 (*c*) 975	24,841
Do. South	117,657	81,097	198,754	106,149 (*a*) 2,436 (*b*) 14,304 (*d*) 619	75,246
Nilgiris, The	19,229	31,429	50,658	20,937 (*b*) 56	29,665
Kollegal	1,179	4,243 (*c*) 975	6,397	4,499 (*b*) 31	1,867
Coimbatore, North	6,189	11,179	17,368	11,906 (*b*) 286	5,176
Do. Central	239	756	995	402 (*b*) 150	443
Do. South	246,140	80,388 (*d*) 619 (*f*) 131	327,278	47,082 (*a*) 1,256 (*b*) 4,575	274,365
Total ..	419,264	288,652	707,916	287,947	419,969
Grand Total, Presidency ..	6,14,397	711,964	1,326,361	806,017	520,344

* Omitted to be shown in the last year's return.

(*a*) Used departmentally.
(*b*) Written off the accounts.
(*c*) Transferred from North Malabar to Kollegal.
(*d*) Transferred from South Malabar to South Coimbatore.
(*e*) Excess as per remeasurement.
(*f*) Excludes 10,848 cubic feet belonging to the Parlakimedi maliahs.
(*g*) Do. 4,915 do. do. do.
(*h*) Do. 5,933 do. do. do.

Account of timber and other produce cut or collected by Government Agency and brought to depot, sold locally or otherwise disposed of during 1912–13—*cont.*

District.	Balance at commencement of the year in forest and sale depots.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in forest and sale depots.
1	2	3	4	5	6
FUEL (CUBIC FEET).					
Northern Circle.					
Ganjām	9,524	40,574	50,098	49,098	1,000
Vizagapatam	729	69,210	69,939	69,197	742
Gōdāvari, Upper	21,582	2,144	23,726	20,655	3,071
Do. Lower	202,392	157,975	360,367	337,544	22,823
Kistna	63,304	80,503	143,807	139,007	4,800
Kurnool, East	11,862	2,800	14,662	14,402	260
Do. South	370,387	648,027	1,018,414	817,738	200,676
Do. West	378,329	458,911	837,240	746,749	90,491
Total ..	1,058,109	1,460,144	2,518,253	2,194,390	323,863
Central Circle.					
Bellary	9,250	15,123	24,383	18,410	5,973
Anantapur	200,396	43,960	244,356	244,356	..
Guntūr	33,635	693,350	776,985	651,345	125,640
Cuddapah, North	32,922	59,700	92,622	80,722	11,900
Do. East	76,421	293,100	369,521	268,616	100,905
Nellore	40,169	27,052	67,221	49,571	17,650
Chingleput	418	1,745	2,163	1,143	1,020
Chittoor	..	283,846	283,846	281,470	2,376
Total ..	443,211	1,417,886	1,861,097	1,595,633	265,464
Southern Circle.					
Vellore, North	23,753	5,304	29,057	5,812	23,245
Do. South	64,759	480	65,239	62,723	2,516
Arcot, South	20,583	204,705	225,288	225,268	20
Salem, North	1,144	1,904	3,048	3,048	..
Do. South	1,665	3,460	5,125	5,125	..
Trichinopoly	12,143	93,705	105,848	102,998	2,850
Madura	..	36,004	36,004	35,904	100
Tinnevelly	60	8,486	8,546	1,628	6,918
Total ..	124,107	354,048	478,155	442,506	35,649
Western Circle.					
Canara, South	276,563	528,200	804,763	515,964 (*a*) 297 (*b*) 2,850	285,652
Malabar, North	11,480	11,901	23,381	19,220 (*a*) 22	4,139
Do. South	128	3,767	3,895	3,761 (*b*) 134	..
Nilgiris, The	231,419	349,299	580,718	370,477 (*b*) 720	209,521
Kollegal	239,775	318,240	558,015	261,136	296,879
Coimbatore, North	76,360	652,789	729,149	631,149	98,000
Do. Central	8,223	109,677	117,900	53,654 (*b*) 2,396	61,850
Do. South	53,031	97,800	150,831	120,531	30,300
Total ..	896,979	2,071,673	2,968,652	1,982,311	986,341
Grand Total, Presidency ..	2,522,406	5,303,751	7,826,157	6,214,840	1,611,317

(*a*) Used departmentally. (*b*) Written off the account.

Account of timber and other produce cut or collected by Government Agency and brought to depot, sold locally or otherwise disposed of during 1912–13—*cont.*

District.	Balance at commencement of the year in forest and sale depots.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in forest and sale depots.
1	2	3	4	5	6
BAMBOOS (NUMBER).					
Northern Circle.					
Ganjām	11,850	595,873	607,723	599,724	7,999
Vizagapatam	1,310	834,477	835,787	834,717	1,070
Gōdāvari, Upper	2,425	1,000	3,425	3,000	425
Do. Lower		13,604	13,604	13,604	..
Kistna	4,550	29,075	33,625	33,625	..
Kurnool; East	..	726	726	626	100
Do. South	3,260	204,364	207,624	187,486	20,138
Do. West	501	2,367,618	2,368,119	2,368,119	..
Total ..	23,896	4,046,737	4,070,633	4,040,901	29,732
Central Circle.					
Bellary	..	6,800	6,800	6,650	150
Anantapur	13,586	3,925	17,511	17,511	..
Guntūr	..	..	..	..	..
Cuddapah, North	155	380	535	535	..
Do. East	..	440	440	440	..
Nellore	..	12	12	..	12
Chingleput	..	..	..	..	..
Chittoor	62	76,781	76,843	76,843	..
Total ..	13,803	88,338	102,141	101,979	162
Southern Circle.					
Vellore, North	..	..	..	..	..
Do. South	..	..	..	..	..
Arcot, South	650	1,440	2,090	2,090	..
Salem, North	24,078	2,085	26,163	26,163	..
Do. South	..	380	380	380	..
Trichinopoly	3,017	23	3,040	3,040	..
Madura	..	287	287	287	..
Tinnevelly	..	67	67	67	..
Total ..	27,745	4,282	32,027	32,027	..
Western Circle.					
Canara, South	8,679	23,273	31,952	24,954 (*a*) 525 (*b*) 633	5,840
Malabar, North	1,057	20,745	21,802	16,375	5,427
Do. South	27,367	62,534	89,901	63,957 (*a*) 3,908 (*b*) 4,101	17,935
Kollegal	5,584	98,081	103,665	91,111	12,554
Coimbatore, North	..	1,865	1,865	1,865	..
Do. Central	..	300	300	300	..
Do. South	..	111	111	111	..
Total ..	42,687	206,909	249,596	207,840	41,756
Grand Total, Presidency ..	108,131	4,346,266	4,454,397	4,382,747	71,650

(*a*) Used departmentally. (*b*) Written off the accounts.

Account of timber and other produce cut or collected by Government Agency and brought to depot, sold locally or otherwise disposed of during 1912-13—*cont.*

District.	Balance at commencement of the year in forest and sale depots.	Received during the year.	Total.	Disposed of during the year.	Balance on hand at close of the year in forest and sale depots.
1	2	3	4	5	6
MINOR PRODUCE (MAUNDS OF 28 LBS.).					
Northern Circle.					
Ganjām	..	151	151	80	71
Vizagapatam	..	20,521	20,521	13,957	6,564
Gōdāvari, Upper	27,579	12,384	39,963	903	39,060
Do. Lower	12,000	41,676	53,676	53,676	..
Kistna	6,167	12,800	18,967	18,915	52
Kurnool, East	3,761	3,737	7,498	5,093	2,405
Do. South	157	898	1,055	422	633
Do. West	1,112	3,647	4,759	4,189	570
Total ..	50,776	96,814	146,590	97,235	49,355
Central Circle.					
Bellary	13	1,586	1,549	1,449	100
Anantapur	206	27	233	201	32
Guntūr	* 24,444	18,884	43,328	30,077	13,251
Cuddapah, North	635	1,870	2,505	2,190	315
Do. East	* 1,347	23,264	24,611	20,046	4,565
Nellore	* 3,570	10,043	13,613	11,419	2,194
Chingleput	3,494	34	3,528	1,138	2,390
Chittoor	416	443	859	859	..
Total ..	34,125	56,101	90,226	67,379	22,847
Southern Circle.					
Vellore, North	580	..	580	..	580
Do. South	320	120	440	440	..
Arcot, South	16	101	117	117	..
Salem, North	449	2,836	3,285	3,245	40
Do. South	203	340	543	203	340
Trichinopoly	178	13	191	191	..
Madura	..	..	..	..	..
Tinnevelly	52	8	60	3	57
Total ..	1,798	3,418	5,216	4,199	1,017
Western Circle.					
Canara, South	711	3,074	3,785	2,091 (*a*) 1,600 (*b*) 91	3
Malabar, North	(*c*)	2	2	2	(*c*)
Do. South	3	(*c*)	3	3	(*c*)
Nilgiris, The	777	17	794	790	4
Kollegal	917	1,896	2,813	2,604 (*b*) 18	191
Coimbatore, North	79	5,253	5,332	5,061 (*b*) 29	242
Do. Central	40	237	277	208 (*b*) 42	27
Do. South	54	1,206	1,260	964 (*a*) 60	236
Total ..	2,581	11,685	14,266	13,563	703
Grand Total, Presidency ..	89,280	167,018	2,56,298	182,376	73,922

* Revised figure.

(*a*) Used departmentally. (*b*) Written off the accounts. (*c*) Less than one quarter.

Annual Form No. 79.

Forest Department, Madras Presidency.

Statement showing the value of Timber and other Produce at Sale depots for 1912–13.

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.	
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.
1	2	3	4	5	6	7	8	9	10
	Northern Circle.			Rs.			Rs.	Rs.	Rs.
Ganjam ..	Timber	..	(*b*)38,175	(*c*) 28, 55	..	12,835	8,259	..	19,996
	Fuel	..	7,092	184	..	1,000	26	..	158
	Bamboos ..	(*d*)11,850	..	(*e*)200	7,999	..	117	..	83
	Minor produce ..	..	..	..	MDS 71	..	1,052	1,052	..
Vizagapatam.	Timber	..	9,595	207	..	1,393	186	..	21
	Fuel	..	729	54	..	742	67	13	..
	Bamboos ..	1,310	..	13	1,070	..	12	..	1
	Minor produce ..	..	..	..	MDS. 6,564	..	112	112	..
Godāvari, Upper. (*a*)	....	..	..	..	..	..	..	..	..
Godāvari, Lower.	Timber	..	1,705	42	.	..	..	..	42
	Fuel	..	56,240	3,125	..	.	..	..	3,125
	Bamboos ..	..	..	..	..	..	..	..	..
	Minor produce ..	..	..	..	..	..	..	..	..
Kistna ..	Timber	..	314	103	..	..	..	..	103
	Fuel	..	63,304	1,238	..	..	..	..	1,238
	Bamboos ..	4,550	..	37	..	..	..	..	37
	Minor produce ..	MDS. 6,167	..	64	..	..	..	..	64
Kurnool, East.	Timber	..	7,972	3,986	..	846	823	..	3,163
	Fuel	..	11,862	245	..	260	6	..	239
	Bamboos ..	..	..	..	100	..	1	1	..
	Minor produce ..	MDS. 3,761	..	1,254	MDS. 2,405	..	802	..	452
Kurnool, South.	Timber	..	32,915	27,590	..	13,742	10,306	..	17,284
	Fuel	..	370,387	15,432	..	200,676	7,595	..	7,837
	Bamboos ..	3,260	..	99	20,138	..	463	364	..
	Minor produce ..	157	..	105	633	..	715	610	..
Kurnool, West.	Timber ..	..	26,317	13,158	..	..	..	..	13,158
	Fuel	..	378,329	23,645	..	..	..	..	23,645
	Bamboos ..	501	..	5	..	..	..	..	5
	Minor produce ..	MDS. 1,112	..	1,529	..	..	..	..	1,529
	Central Circle.								
Bellary ..	Timber	..	826	2,520	..	..	..	..	2,520
	Fuel	..	9,250	185	..	5,973	112	..	73
	Bamboos ..	..	..	..	..	..	..	..	..
	Minor produce ..	..	..	11	..	..	..	..	11
Anantapur ..	Timber	..	308	94	..	..	..	..	94
	Fuel	..	200,396	10,843	..	..	..	..	10,843
	Bamboos ..	13,586	..	946	..	..	..	..	946
	Minor produce ..	MDS. 206	..	824	MDS. 32	..	128	..	696
Guntūr ..	Timber ..	..	..	..	..	..	..	..	..
	Fuel	..	75	6	..	..	..	..	6
	Bamboos ..	..	..	..	..	..	..	..	..
	Minor produce ..	MDS 1,520	..	380	MDS 103	..	26	..	354
North Cuddapah.	Timber	..	3,769	4,992	..	1,533	2,117	..	2,875
	Fuel	..	9,220	633	..	6,900	414	..	219
	Bamboos ..	155	..	12	..	..	.	..	12
	Minor produce ..	MDS. 320	..	49	..	..	..	..	49

(*a*) No sale depots in this district, hence blank. Last year's balance relates to Forest depots.
(*b*) Excludes 7,572 c. ft. belonging to the Parlakimedi Maliahs.
(*c*) Do. Rs 1,109 being the value of sal logs belonging to the Parlakimedi Maliahs.
(*d*) Do. 1,099 bamboos belonging to the Parlakimedi Maliahs.
(*e*) Do. Rs. 72 being value of bamboos belonging to the Parlakimedi Maliahs.

Statement showing the value of Timber and other Produce at Sale depots for 1912–13—*cont.*

District	Description of timber or produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.	
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.
1	2	3	4	5	6	7	8	9	10
	Central Circle—cont.			Rs.			Rs.	Rs.	Rs.
East Cuddapah.	Timber	..	3,990	2,015	..	3,334	2,373	358	..
	Fuel	..	2,235	115	..	32	24	..	91
	Bamboos ..	..	..	..	..	..	..	..	..
	Minor produce ..	MDS. 664	..	130	MDS. 2,690	..	622	492	..
Nellore ..	Timber	..	99	5	..	..	..	..	5
	Fuel	..	37,021	3,122	..	..	..	..	3,122
	Bamboos ..	..	..	..	..	..	..	..	..
	Minor produce ..	MDS. * 3,174	..	1,855	MDS. 2,139	..	1,182	..	673
Chingleput.	Timber	..	76	14	..	..	..	..	14
	Fuel	..	418	51	..	† 1,020	..	..	51
	Bamboos ..	..	..	..	..	..	..	..	..
	Minor produce ..	MDS. † 3,494	..	..	† 2,390	..	..	..	..
Chittoor ..	Timber	..	45	12	..	24	95	83	..
	Fuel	..	23,560	3,226	..	2,601	210	..	3,016
	Bamboos ..	..	..	..	..	..	..	..	..
	Minor produce ..	MDS. 107	..	543	397	..	853	310	..
	Southern Circle.								
Vellore, North.	Timber	..	1,311	654	..	..	..	..	654
	Fuel	..	11,394	667	..	10,886	555	..	112
	Minor produce ..	MDS. 68	..	52	MDS. 68	..	1	..	51
Vellore, South.	Timber	..	3,127	34,569	..	2,318	27,552	..	7,017
	Fuel	..	34,671	1,926	..	533	29	..	1,897
	Minor produce ..	MDS. 320	..	17	..	..	..	..	17
Arcot, South ..	....	..	..		..	..	..	..	..
Salem, North.	Timber	..	2,276	1,509	..	1,240	459	..	1,050
	Fuel	..	1,144	138	..	..	..	..	138
	Bamboos ..	24,078	..	472	..	..	..	..	472
	Minor produce ..	MDS. 449	..	45	MDS. 40	..	4	..	41
Salem, South.	Timber	..	519	268	..	285	402	134	..
	Fuel	..	1,665	156	..	..	..	..	156
	Minor produce ..	MDS. 203	..	4	MDS. 340	..	15	11	..
Trichinopoly	Timber	..	223	60	..	13	3	..	57
	Fuel	..	51	6	..	..	..	..	6
	Bamboos ..	3,017	..	15	..	..	..	..	15
	Minor produce ..	MDS. 178	..	50	..	..	..	..	50
Madura ..	Timber	..	12	3	..	27	7	4	..
	Fuel	..	..	..	..	100	6	6	..
Tinnevelly ..	Timber	..	2,309	331	..	4,949	549	218	..
	Fuel	..	60	4	..	6,918	103	99	..
	Minor produce ..	MDS. 52	..	198	MDS. 57	..	160	..	38
	Western Circle.								
South Canara.	Timber	..	984	615	..	986	619	4	..
	Fuel	..	69,831	6,749	..	98,055	11,979	5,230	..
	Bamboos	549	..	61	812	..	89	28	..
	Minor produce ..	QRS. 23	..	147	..	..	..	..	147

* Less than one quarter.

† Deducted as these were the stock at *forest* and not *sale* depots.

Statement showing the value of Timber and other Produce at Sale depots for 1912–13—*concld.*

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.	
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.
1	2	3	4	5	6	7	8	9	10
	Western Circle—cont.			Rs.			Rs.	Rs.	Rs.
North Malabar.	Timber	..	17,984	7,837	..	21,948	10,949	3,112	..
	Fuel	..	11,480	932	..	4,139	284	..	648
	Bamboos ..	1,057	..	95	5,427	..	486	391	..
		QRS.			QRS.				
	Minor produce ..	*..	..	6	*..	..	24	18	..
South Malabar.	Timber	..	117,657 †-117,657	1,39,500 †-1,39,500	..	..	..	..	..
	Fuel	..	128 † — 128	3 † — 3	..	..	..	..	..
	Bamboos	27,367	..	1,915	..	..	..	..	1,915
		QRS.							
	Minor produce ..	3	..	500	..	..	..	..	500
The Nilgiris.	Timber	..	2,442	1,620	..	3,470	1,396	..	224
	Fuel	..	19,773	1,576	..	27,479	2,196	620	..
Kollegal.	Timber	..	1,086	472	..	1,850	913	441	..
	Fuel	..	..	..	..	920	43	43	..
	Bamboos	5,004	..	80	6,718	..	265	185	..
		QRS.			QRS.				..
	Minor produce ..	650	..	1,269	169	..	576	..	693
North Coimbatore.	Timber	..	713	9,974	..	64	53	..	9,921
		QRS.			QRS.				
	Minor produce ..	79	..	351	180	..	706	355	..
Central Coimbatore.	Fuel	..	..	..	..	397	32	32	..
		QRS.			QRS.				
	Minor produce ..	40	..	14	27	..	7	..	7
South Coimbatore.	Timber	..	94,478	1,22,867	..	1,20,952	1,81,191	58,324	..
	Fuel	..	53,031	1,072	..	27,720	486	..	586
		QRS.			QRS.				
	Minor produce ..	54	..	533	236	.	588	55	..
Northern Circle.	Timber	..	116,993	73,341	..	28,816	19,574	..	53,767
	Fuel	..	887,943	43,923	..	202,678	7,694	13	36,242
	Bamboos ..	21,471	..	354	29,307	..	593	365	126
		MDS.			MDS.				
	Minor produce ..	11,197	..	2,952	9,673	..	2,681	1,774	2,045
	Total value ..	..	..	1,20,570	..	..	30,542	..	90,028
Central Circle.	Timber	..	9,113	9,652	..	4,891	4,585	..	5,067
	Fuel	..	282,175	18,181	..	16,526	760	..	17,421
	Bamboos ..	13,741	..	958	..	..	..	..	958
		MDS.							
	Minor produce ..	9,485	..	3,792	7,751	..	2,811	..	981
	Total value ..	..	..	32,583	..	..	8,156	..	24,427
Southern Circle.	Timber	..	9,777	37,394	..	8,832	28,972	..	8,422
	Fuel	..	48,985	2,897	..	18,437	693	..	2,204
	Bamboos No	27,095	..	487	..	..	..	..	487
		MDS.			MDS.				
	Minor produce ..	1,276	..	366	505	..	180	..	186
	Total value ..	..	..	41,144	..	..	29,845	..	11,299
Western Circle.	Timber ..	..	117,687	1,43,385	..	149,270	1,95,121	51,736	..
	Fuel		154,115	10,329	..	158,710	15,020	4,691	.
	Bamboos ..	33,977	..	2,151	12,957	..	840	..	1,311
		QRS.			QRS.				
	Minor produce ..	849	..	2,820	612	..	1,901	..	919
	Total value ..	..	.	1,58,685	..	..	2,12,882	54,197	..
Total Presidency.	Timber	..	2,53,570	2,63,772	..	191,809	2,48,282	51,736	67,256
	Fuel	..	1,373,218	75,330	..	896,351	24,167	4,704	55,867
	Bamboos	96,284		3,950	42,264	..	1,433	365	2,882
		MDS.			MDS.				
	Minor produce ..	21,952	..	9,930	18,029	..	7,573	1,774	4,131
		QRS.			QRS.				
		849			612				
	Grand Total, Presidency ..	..	..	3,52,982	..	..	2,81,425	..	71,557

* Revised figure.

† Value not settled for want of demand.

ANNUAL FORM No. 80.

Forest Department, Madras Presidency.

SUMMARY of Revenue of the different districts for the Forest year 1912–13.

ANNUAL

Forest Department,

SUMMARY of Revenue of the different districts

Budget heads—Receipts.	Northern Direction.	Ganjam.	Vizagapatam.	Godavari, Upper.	Godavari, Lower.	Kistna.	Kurnool, East.
1	2	3	4	5	6	7	8
Receipts.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Timber and other produce removed from the forests by Government Agency—							
(*a*) Timber	45	10,089	4,034	1,813	2,548	1,087	16,400
(*b*) Firewood and charcoal.	60	3,117	5,270	799	13,582	7,945	253
(*c*) Bamboos	..	4,963	12,637	..	..	273	..
(*d*) Sandalwood	..	..	..	..	..	..	..
(*e*) Grass and other minor produce	20	840	510	408	..	119	1,442
II. Timber and other produce removed from the forests by consumers or purchasers—							
(*a*) Timber	..	16,606	4,104	33,256	33,046	14,601	2,230
(*b*) Firewood and charcoal	..	9,567	1,667	602	26,767	22,944	574
(*c*) Bamboos	..	2,449	4,046	8,893	34,359	1,459	2,350
(*d*) Grazing and fodder grass	..	11,412	5,356	8,537	17,827	22,364	31,906
(*e*) Other produce	..	2,902	9,612	983	35,757	9,002	13,459
(*f*) Tree-owner's fees	..	907	383	..	4,584	10,461	1,482
(*g*) Other items	..	..	10	..	..	..	..
(*h*) Commutation fees	..	..	..	2,222	..	..	..
III. Confiscated drift and waifwood	..	310	60	1,926	6,503	87	113
IV. Revenue from forest not managed by Government.							
V. Miscellaneous—							
(*a*) Fines and forfeitures.	..	2,483	1,161	108	4,663	3,386	2,646
(*b*) Other sources	32	1,108	397	549	4,755	1,410	425
Total, Receipts	157	66,753	49,247	60,096	1,84,391	95,138	73,280

Budget heads.	Southern Direction.	North Vellore.	South Vellore.	Arcot, South.	North Salem.	South Salem.	Trichinopoly *cum* Tanjore.
	22	23	24	25	26	27	28
Receipts	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Timber and other produce removed from the forests by Government Agency—							
(*a*) Timber	..	133	79	183	4,198	897	159
(*b*) Firewood and charcoal	..	924	579	20,614	308	127	5,832
(*c*) Bamboos	..	— 155	20	187	253	..	88
(*d*) Sandalwood	16,310	434	1,44,059	..	3	3,372	..
(*e*) Grass and other minor produce	..	217	24	1	353	17	46
II. Timber and other produce removed from the forests by consumers or purchasers—							
(*a*) Timber	..	15,486	17,994	16,116	7,406	9,277	12,300
(*b*) Firewood and charcoal	..	32,895	18,978	79,651	10,695	18,079	79,402
(*c*) Bamboos	..	17,214	36,588	317	9,855	27,386	4,493
(*d*) Grazing and fodder grass	..	26,613	27,291	27,798	47,415	21,303	29,217
(*e*) Other produce	700	26,976	20,650	37,269	28,797	28,318	32,236
(*f*) Rents for trees tapped	..	6,244	1,213	2,216	1,308	275	236
(*g*) Other items	..	..	..	40	601	..	..
(*h*) Commutation fees	..	..	..	..	..	..	..
III. Confiscated drift and waifwood	..	52	122	170	143	75	76
IV. Revenue from forest not managed by Government—							
(*a*) Shared and private forests	..	..	..	..	..	..	..
V. Miscellaneous—							
(*a*) Fines and forfeitures	..	18,104	14,046	16,966	7,268	5,178	26,229
(*b*) Other sources	16	1,132	691	926	1,526	5,990	206
Total, Receipts	17,026	1,46,269	2,82,334	2,02,454	1,20,129	1,20,294	1,90,520

ACCOUNTANT-GENERAL'S OFFICE,
MADRAS, 1*st September* 1913.

S. VENKATARAMANAN,
for *Deputy Accountant-General.*

NOTE Southern Circle.—The revenue under "Direction" is distributed as follows:—
I. (*d*) South Vellore, Rs. 36 ; North Salem, Rs. 16,274.
II. (*e*) North Vellore, Rs. 700 ; V. (*b*) Direction, Rs. 3 ; South Vellore, Rs. 6 ; and Madura, Rs. 7.

ACCOUNTANT-GENERAL'S OFFICE,
MADRAS, 5*th September* 1913.

S. VENKATARAMANAN,
for *Deputy Accountant-General.*

FORM No. 80.

Madras Presidency.

for the Forest year 1912–13.

Circle.			Central Circle.									
Kurnool, South.	Kurnool, West.	Total.	Direction.	Guntûr.	Nellore.	Cuddapah, North.	Cuddapah, East.	Bellary.	Anantapur.	Chittoor.	Chingleput.	Total.
9	10	11	12	13	14	15	16	17	18	19	20	21
RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
14,934	38,890	89,840	..	3,297	9	4,369	11,715	— 623	148	1,542	2	20,45
28,104	20,513	79,643	..	19,831	4,511	2,323	13,183	786	4,489	17,607	457	63,187
2,424	24,581	44,878	..	..	..	28	..	302	264	1,291	..	1,885
..	..	..	..	..	..	..	..	3,937	..	3	..	3,940
578	1,193	5,110	..	3,125	8,713	1,098	4,998	44	..	1,137	..	19,115
1,775	385	1,06,003	..	27,880	9,360	4,098	709	17,395	12,826	4,689	16,535	93,492
6,132	9,078	77,331	..	12,783	59,322	5,913	10,220	8,317	6,013	10,918	13,484	1,26,970
7,060	12,189	72,805	..	10	12	594	6,188	50	..	3,992	35	10,881
11,864	19,632	1,28,898	..	67,990	53,696	18,328	16,651	41,257	29,288	20,669	12,820	2,60,729
6,254	17,671	95,640	..	19,595	52,770	13,806	9,788	40,856	1,01,614	33,492	12,039	2,83,960
2,589	15,868	36,274	..	4,816	2,766	1,871	1,546	28,534	11,585	2,641	4,011	57,770
3	..	13	..	..	..	..	524	..	..	..	..	524
..	..	2,222	..	..	..	..	..	..	..	..	..	..
2,574	762	12,335	..	115	540	122	200	246	154	60	8	1,445
3,139	2,802	20,388	..	18,906	8,166	4,345	8,030	10,310	8,691	6,188	3,705	68,341
1,572	1,568	11,816	..	863	517	396	945	2,129	345	1,166	1,104	7,465
89,002	1,65,132	7,83,196	..	1,79,211	2,00,382	57,291	84,697	1,53,570	1,75,417	1,05,395	64,200	10,20,163

Circle.			Western Circle.									
Madura.	Tinnevelly and Rāmnād.	Total.	Direction.	South Canara.	North Malabar.	South Malabar.	The Nilgiris.	Kollegal.	North Coimbatore.	Central Coimbatore.	South Coimbatore.	Total.
29	30	31	32	33	34	35	36	37	38	39	40	41
RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS	RS.	RS.
30	52	5,731	3,535	6,381	14,647	1,31,559	7,570	723	713	7	62,337	2,27,472
9,225	392	38,001	..	44,471	711	198	24,611	7,002	16,406	1,768	2,740	97,907
..	4	397	..	2,230	1,465	5,065	..	2,499	25	..	..	11,284
..	..	1,64,178	97,848	..	..	..	3,801	3	94	6	.	1,01,752
117	10	785	6	13,336	10	476	1,307	4,687	7,009	29	2,535	29,395
16,266	3,400	98,245	..	14,958	23,413	111	1,359	1,844	2,451	6,955	2,435	53,526
79,431	91,613	4,10,744	..	17,614	..	5	2,473	287	2,435	24,547	5,586	52,947
3,578	111	99,542	..	1,992	364	752	2,993	650	6,799	7,266	1,660	22,476
32,698	6,251	2,18,586	..	11,777	2,542	2	9,423	20,995	29,116	6,703	2,738	83,296
32,254	25,808	2,33,008	530	12,932	3,985	2,118	3,724	2,580	3,522	9,347	2,146	40,884
6	15	11,513	..	2,203	..	3	..	23	31	— 3	..	2,257
..	..	641	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..
409	788	1,835	..	1,033	..	82	48	281	273	272	581	2,570
..	..	..	..	..	..	..	..	..	..	..	..	..
16,826	6,041	1,10,658	..	7,976	161	47	443	5,005	6,615	6,009	1,789	28,045
1,714	2,127	14,328	1,02,052	6,113	6,502	9,731	7,263	2,100	3,480	2,083	14,085	1,53,409
1,92,554	1,36,612	14,08,192	2,03,971	1,43,016	53,800	1,50,149	65,015	48,679	78,969	64,989	98,632	9,07,220

NOTE (*Central Circle*).—The revenue realised in the Madras Bank and credited under "Direction" has been distributed to the districts concerned.

ACCOUNTANT-GENERAL'S OFFICE,
MADRAS, 1*st September* 1913.

S. VENKATARAMANAN,
for *Deputy Accountant-General.*

NOTE (*Western Circle*).—Particulars of revenue credited under Direction—

I (*a*) and II (*e*) relate to *South Coimbatore.*
(*d*) *Kollegal*, Rs. 58,782. *North Coimbatore*, Rs. 39,066.
(*e*) *South Canara*, Rs. 2. *The Nilgiris*, Rs. 3. *Central Coimbatore*, Re. 1.
V (*b*) *Direction*, Rs. 276.
South Malabar, Rs. 3,605. *North Malabar*, Rs. 23,090.
South Coimbatore, Rs. 72,171. *The Nilgiris*, Rs. 2,910.

South Malabar.—The revenue under I (*a*) includes Rs. 460 relating to *South Coimbatore* and that under V (*b*) includes Rs. 4,490 and Rs. 3,360 relating to *North Malabar* and *the Nilgiris* respectively.

ACCOUNTANT-GENERAL'S OFFICE,
MADRAS, 5*th September* 1913.

S. VENKATARAMANAN,
for *Deputy Accountant-General.*

SUMMARY of Expenditure of the different districts for the Forest year 1912–13.

Budget heads.	Direction.	Ganjam.	Vizagapatam.	Godavari, Upper.	Godavari, Lower.	Kistna.	Kurnool, East.	Kurnool, South.	Kurnool, West.	Total.
1	2	3	4	5	6	7	8	9	10	11
Northern Circle.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Refunds and drawbacks ..	..	819	42	49	2,765	3,897	118	189	750	8,629
A Conservancy and Works.										
Timber, etc., removed from the forest by Government Agency—										
(*a*) Timber	3	5,156	452	— 37	..	248	5,950	5,431	18,031	35,234
(*b*) Firewood and charcoal ..	8	1,620	1,664	261	1,707	1,011	73	16,740	9,368	32,452
(*c*) Bamboos	..	3,208	7,569	..	..	620	..	1,714	11,480	24,591
(*d*) Sandalwood ..	..	..	..	..	..	..	..	..	..	..
(*e*) Grass and other minor produce..	..	1,539	130	270	..	209	1,177	1,336	1,731	6,392
II. Timber, etc., removed from the forests by consumers, etc. ..	..	6,134	5,596	3,979	12,390	2,594	6,837	6,452	11,489	55,471
III. Confiscated drift and waifwood	..	12	..	13	1,813	..	..	67	7	1,912
V. Rent of leased forests and payments to shareholders in forests managed by Government	..	..	474	..	..	..	..	..	..	474
VI. Live-stock, stores, etc.—										
(*a*) Purchase of cattle.	..	295	..	..	..	..	..	966	..	1,261
(*b*) Feed and keep of cattle	17	2,029	1,042	676	.	..	..	2,157	1,628	7,549
(*c*) Stores, tools and plant	1,009	476	113	739	4,031	728	389	1,724	708	9,917
VII. Communications and buildings—										
(*a*) Roads and bridges	55	6,006	561	4,207	2,140	4,055	6,274	10,005	2,584	35,887
(*b*) Buildings ..	1,604	9,786	4,713	2,368	4,591	1,512	12,134	7,876	4,529	49,113
(*c*) Other works	..	393	105	169	295	1,184	16	1,102	2,341	5,605
VIII. Demarcation, improvement and extension of forests—										
(*a*) Demarcation ...	..	564	653	8,714	8	724	627	484	167	11,941
(*b*) Cost of forest settlement; compensation for land and rights.	..	477	92	..	188	..	71	..	..	828
(*c*) Surveys—										
(1) Local ..	..	1,304	93	2,773	638	840	1,398	2,509	1,071	10,626
(2) India ..	..	..	..	..	..	..	..	..	..	..
(*d*) Working plans ..	..	..	..	..	..	..	..	1	.	1
(*e*) Sowing and planting	5,046	508	155	252	4,879	7,444	10,165	4,577	42,601	75,627
(*f*) Protection from fire	..	4,459	2,401	5,215	6,101	1,796	5,427	21,513	10,649	57,561
(*g*) Other works ..	..	268	74	..	1,170	8,832	700	548	3,532	15,124
X. Miscellaneous—										
(*a*) Law charges ..	..	..	..	..	..	..	..	..	..	..
(*b*) Other charges ..	75	233	..	..	56	218	..	476	550	1,608
Total, A. Conservancy and Works	7,817	44,467	25,887	29,599	40,007	32,015	51,238	85,678	1,22,466	4,39,174

ACCOUNTANT-GENERAL'S OFFICE,
MADRAS, 1*st September* 1913.

S. VENKATARAMANAN,
for *Deputy Accountant-General.*

Summary of Expenditure of the different districts for the Forest year 1912–13—*cont.*

Budget heads.	Direction.	Ganjam.	Vizagapatam.	Godavari, Upper.	Godavari, Lower.	Kistna.	Kurnool East.	Kurnool, South.	Kurnool, West.	Total.
1	2	3	4	5	6	7	8	9	10	11
Northern Circle—cont. *B. "Establishments."*	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Brought forward, Total A. "Conservancy and Works"	7,817	44,467	25,887	29,599	40,007	32,015	51,238	85,678	1,22,466	4,39,174
I. Salaries—										
(*a*) Conservators	22,800	..	..	..	..	..	..	..	..	22,800
(*b*) Superior officers	1,045	12,587	20,732	4,385	8,957	5,947	7,950	7,588	21,345	90,536
(*c*) Subordinate Forest and Depot establishments	3,416	20,693	6,997	13,388	12,842	8,576	12,203	19,989	22,086	1,20,184
(*d*) Office establishments	9,458	6,756	4,861	4,831	6,468	3,768	4,908	6,012	8,183	55,245
(*e*) Deputation and special Allowances	..	— 32	— 14	7	10	20	..	53	27	71
II. Travelling allowances—										
(*a*) Conservators	3,273	..	..	..	..	..	..	..	..	3,273
(*b*) Superior officers	..	2,089	3,419	1,964	1,326	1,357	1,634	2,010	2,965	16,764
(*c*) Subordinate Forest and Depot establishments	318	5,732	1,819	4,059	4,409	2,624	3,769	6,901	6,208	35,839
(*d*) Office establishments	1,555	2,041	959	1,222	1,475	933	1,594	1,754	1,468	13,001
III. Contingencies—										
(*a*) Rents, rates and taxes	136	140	471	..	167	315	269	80	189	1,767
(*b*) Official postage and service telegrams	1,228	1,512	685	967	1,298	1,243	746	1,209	1,342	10,230
(*c*) Telephone Charges	..	..	..	..	..	..	..	..	..	..
(*d*) Sundries	11,814	1,843	2,127	1,989	3,476	1,115	1,895	1,362	1,851	27,472
Total, B. "Establishments" ..	55,043	53,361	42,056	32,812	40,428	25,898	34,968	46,958	65,658	3,97,182
Grand Total of expenditure A and B ..	62,860	97,828	67,943	62,411	80,435	57,913	86,206	1,32,636	1,88,124	8,36,356

ACCOUNTANT-GENERAL'S OFFICE,
MADRAS, 1*st September* 1913.

S. VENKATARAMANAN,
for *Deputy Accountant-General.*

SUMMARY of Expenditure of the different districts for the Forest year 1912-13.

Budget heads.	Direction.	Guntûr.	Nellore.	Cuddapah, North.	Cuddapah, East.	Bellary.	Anantapur.	Chittoor.	Chingleput.	Total.
CENTRAL CIRCLE.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Refunds and Drawbacks.	..	1,371	1,628	1,464	170	392	773	351	454	6,603
A. Conservancy and Works.										
I. Timber, etc., removed from the forest by Government Agency—										
(*a*) Timber ..	..	650	..	1,273	3,973	53	53	382	..	6,384
(*b*) Firewood and charcoal.	..	11,852	1,249	4,321	9,590	229	3,274	5,846	1,237	37,598
(*c*) Bamboos ..	..	..	..	11	..	240	121	622	..	994
(*d*) Sandalwood ..	..	..	..	..	..	705	..	4	..	709
(*e*) Grass and other minor produce.	..	2,281	2,746	732	5,036	6	..	656	..	11,457
II. Timber, etc., removed from the forests by consumers, etc.	..	3,509	4,781	7,352	8,461	2,468	1,945	2,772	1,623	32,911
III. Confiscated, drift and whirlwood.	..	4	..	26	13	11	..	..	..	54
V. Rent of leased forests and payments to shareholders in forests managed by Government.	..	..	..	..	..	8,000	..	..	..	8,000
VI. Live-stock, stores, tools and plant—										
(*a*) Purchase of cattle.	..	..	..	..	1,044	..	..	..	..	1,044
(*b*) Feed and keep of cattle.	..	..	..	..	..	59	..	194	..	253
(*c*) Stores, tools and plant.	2,883	1,269	1,590	5	800	531	806	1,403	277	9,564
VII. Communications and buildings—										
(*a*) Roads and bridges.	..	17	81	1,587	4,986	2,428	3,158	1,941	73	14,271
(*b*) Buildings ..	..	2,880	9,147	4,614	9,314	12,873	6,815	5,470	703	51,816
(*c*) Other works ..	..	468	70	728	338	401	1,244	468	180	3,897
VIII. Demarcation, improvement and extension of forests—										
(*a*) Demarcation ..	..	551	845	973	471	430	2,501	893	1,175	7,839
(*b*) Cost of forest settlement; compensation for land and rights.	..	..	95	..	2,076	5,569	750	110	..	8,600
(*c*) Surveys—										
(1) Local ..	983	1,054	1,263	633	753	1,468	1,452	480	388	8,474
(2) India ..	..	..	..	..	..	..	..	..	..	..
(*d*) Working plans.	..	..	20	— 32	..	..	..	..	..	— 2
(*e*) Sowing and planting.	..	16,741	17,557	1,244	683	12,704	3,116	970	1,743	54,758
(*f*) Protection from fire.	..	355	1,357	5,360	5,224	7,366	6,033	1,486	907	28,088
(*g*) Other works ..	..	11,005	6,805	4,574	1,936	15,174	16,549	13,078	10,739	79,860
IX. Miscellaneous—										
(*a*) Law charges ..	..	3	4	..	..	200	423	21	..	651
(*b*) Other charges .	93	299	15	591	938	1,259	..	52	20	3,267
Total, A. Conservancy and Works.	3,959	52,938	47,635	33,992	55,636	72,17	48,240	36,848	19,065	3,70,487

Summary of Expenditure of the different districts for the Forest year 1912-13—*cont.*

Budget heads.	Direction.	Guntur.	Nellore.	Cuddapah, North.	Cuddapah, East.	Bellary.	Anantapur.	Chittoor.	Chingleput.	Total.
CENTRAL CIRCLE—*cont.*										
B. "*Establishments.*"	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Brought forward, Total A. "Conservancy and Works"	3,959	52,938	47,635	33,992	55,636	72,174	48,240	36,848	19,065	3,70,487
I. Salaries—										
(*a*) Conservators	20,843	..	..	..	..	..	..	..	..	20,843
(*b*) Superior officers ..	2,744	9,388	7,742	5,680	7,456	13,212	15,000	15,000	7,528	83,750
(*c*) Subordinate Forest and Depot establishments.	3,927	13,862	14,847	8,744	14,629	22,794	13,604	15,062	8,169	1,15,638
(*d*) Office establishments ..	9,254	6,711	10,843	4,311	5,194	7,055	4,722	4,833	3,801	56,724
(*e*) Deputation and special allowances	..	..	4	..	..	..	..	4	..	8
II. Travelling allowances—										
(*a*) Conservators ..	1,226	..	373	53	..	247	..	96	..	1,995
(*b*) Superior officers ..	91	1,473	1,134	1,093	1,333	1,701	1,282	1,084	1,330	10,521
(*c*) Subordinate Forest and Depot establishments ..	205	4,133	4,022	2,743	3,920	6,655	4,002	4,193	2,087	31,960
(*d*) Office establishments	1,049	1,234	2,353	762	869	1,604	1,775	748	584	10,978
III. Contingencies—										
(*a*) Rents, rates and taxes.	..	221	109	59	70	740	141	156	32	1,528
(*b*) Official postage and service telegrams ..	877	1,530	1,734	859	994	1,489	1,288	1,288	710	10,769
(*c*) Telephone charges ..	..	..	..	..	..	..	..	..	..	
(*d*) Sundries	8,134	1,484	1,493	1,257	1,729	3,451	3,216	1,552	713	23,029
Total, B. "Establishments".	48,350	40,036	44,654	25,561	36,194	58,948	45,030	44,016	24,954	3,67,743
Grand Total of Expenditure A and B.	52,309	92,974	92,289	59,553	91,830	1,31,122	93,270	80,864	44,019	7,38,230

ACCOUNTANT-GENERAL'S OFFICE,
MADRAS, 1*st September* 1913.

S. VENKATARAMANAN,
for *Deputy Accountant-General.*

SUMMARY of Expenditure of the different districts for the Forest year 1912–13.

Budget heads.	Direction.	North Vellore.	South Vellore.	South Arcot.	North Salem.	South Salem.	Trichinopoly *cum* Tanjore.	Madura.	Tinnevelly and Ramnad.	Total.
1	2	3	4	5	6	7	8	9	10	11
Southern Circle.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I Refunds and Drawbacks.	..	388	1,590	672	766	962	1,880	345	416	7,019
A. Conservancy and Works.										
I. Timber and other produce removed from the forests by Government Agency—										
(*a*) Timber ..	..	49	237	..	1,737	406	312	..	..	2,741
(*b*) Firewood and charcoal ..	..	54	870	3,141	1,609	587	3,230	8,028	157	17,676
(*c*) Bamboos ..	..	..	38	45	64	..	—9	..	10	148
(*d*) Sandalwood ..	..	2	5,558	..	2,852	295	..	..	..	8,707
(*e*) Grass and other minor produce.	..	10	..	..	188	25	..	..	12	235
II. Timber and other produce removed from the forests by consumers or purchasers ..	..	2,795	2,443	1,936	2,019	3,884	3,333	3,886	2,995	23,291
III. Confiscated drift and waifwood	..	..	..	..	..	6	3	6	..	15
V. Rent of leased forests and payments to shareholders in forests managed by Government.	..	..	..	..	37	..	..	..	..	37
VI. Live-stock, stores, tools and plant—								..	..	..
(*a*) Purchase of cattle ..	..	..	..	..	..	..	..	..	..	..
(*b*) Feed and keep of cattle ..	..	103	15	..	..	..	..	..	..	118
(*c*) Stores, tools and plant ..	259	957	198	82	297	405	421	286	348	3,253
VII. Communications and buildings –										
(*a*) Roads and bridges ..	..	4,017	5,294	..	4,345	4,340	3,373	10,769	3,506	25,644
(*b*) Buildings ..	..	5,738	6,772	2,442	11,172	9,413	5,204	12,051	4,850	57,642
(*c*) Other works ..	..	287	433	111	662	624	364	581	676	3,788
VIII. Demarcation, improvement and extension of forests—										
(*a*) Demarcation ..	..	24	18	170	—120	467	65	5,031	800	6,455
(*b*) Cost of forest settlement; compensation for land and rights ..	..	..	..	..	..	..	..	650	163	813
(*c*) Surveys { Local.	580	..	584	468	1,740	1,184	580	1,125	266	6,527
(*c*) Surveys { India.	..	.	..	..	..	..	..	..	..	..
(*d*) Working plans.	..	..	..	..	..	..	..	..	..	..
(*e*) Sowing and planting ..	36	5,851	202	4,764	764	219	3,933	7,439	985	24,193
(*f*) Protection from fire	..	617	3,155	316	2,194	3,316	571	3,117	2,708	15,994
(*g*) Other works ..	..	7,377	8,258	13,989	7,375	6,425	10,614	13,390	5,896	73,324
IX. Miscellaneous—										
(*a*) Law charges ..	..	..	..	..	22	..	..	..	2	24
(*b*) Other charges ..	..	67	276	.	153	9	49	137	66	757
Total, A. Conservancy and Works	875	27,948	34,401	27,464	37,110	31,605	32,043	66,496	23,440	2,81,382

Summary of Expenditure of the different districts for the Forest year 1912–1913—*cont.*

Budget heads	Direction.	North Vellore.	South Vellore.	South Arcot.	North Salem.	South Salem.	Trichinopoly *cum* Tanjore.	Madura.	Tinnevelly and Ramnad.	Total.
1	2	3	4	5	6	7	8	9	10	11
Southern Circle—cont.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
B. Establishments.										
Brought forward, Total A. "Conservancy and Works."	875	27,948	34,401	27,464	37,110	31,605	32,043	66,496	23,440	2,81,382
I. Salaries—										
(*a*) Conservators ..	18,000	..	..	..	..	..	..	..	..	18,000
(*b*) Superior officers ..	1,045	5,800	8,173	5,490	14,363	6,052	17,194	22,754	15,000	95,871
(*c*) Subordinate Forest and Depôt establishments.	1,200	10,226	13,808	10,651	12,230	15,340	16,631	15,528	14,620	1,10,234
(*d*) Office establishments.	8,067	2,855	5,090	4,855	6,087	5,382	6,958	6,558	5,650	51,502
(*e*) Bonus	..	97	13	9	26	17	..	..	..	161
II. Travelling Allowances—										
(*a*) Conservators ..	2,285	..	..	..	..	..	..	..	..	2,285
(*b*) Superior officers ..	..	990	1,371	1,149	1,569	1,044	2,102	2,725	1,036	11,986
(*c*) Subordinate Forest and Depot establishments.	71	2,955	3,581	3,024	4,154	4,053	4,599	3,948	3,326	29,711
(*d*) Office establishments.	624	577	979	929	870	608	1,323	1,872	980	8,762
III. Contingencies—										
(*a*) Rents, Rates and Taxes	2	55	205	323	124	65	137	216	166	1,293
(*b*) Official postage and Service telegrams.	740	1,074	1,485	1,893	1,284	1,051	1,969	1,652	1,076	12,224
(*c*) Telephone charges.	..	..	..	..	..	..	..	..	..	..
(*d*) Sundries	7,304	1,682	1,260	1,020	1,703	1,766	1,525	1,962	801	19,023
Total B. "Establishments."	39,338	26,311	35,965	29,343	42,409	35,378	52,438	57,215	42,655	3,61,052
Grand Total of Expenditure A and B.	40,213	54,259	70,366	56,807	79,519	66,983	84,481	1,23,711	66,095	6,42,434

ACCOUNTANT-GENERAL'S OFFICE,
MADRAS, 5*th September* 1913.

S. VENKATARAMANAN,
for *Deputy Accountant-General.*

Summary of Expenditure of the different districts for the Forest year 1912–13.

Budget heads.	Direction.	South Canara.	North Malabar.	South Malabar.	The Nilgiris.	Kollegal.	North Coimbatore.	Central Coimbatore.	South Coimbatore.	Total.
1	2	3	4	5	6	7	8	9	10	11
Western Circle.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I. Refunds and Drawbacks	10	1,535	3	..	113	26	177	981	80	2,925
A. Conservancy and Works.										
I. Timber, etc., removed from the Forests by Government Agency—										
(*a*) Timber	..	1,433	8,992	13,440	3,598	420	329	..	8,822	37,034
(*b*) Firewood and charcoal.	..	25,620	445	3	18,493	6,926	8,433	2,005	2,132	64,057
(*c*) Bamboos	..	1,319	940	2,466	..	1,363	24	87	1	6,200
(*d*) Sandalwood ..	..	..	..	..	177	3,625	10,877	..	..	14,679
(*e*) Grass and other minor produce.	..	3,759	..	4	96	1,552	3,646	30	1,062	10,149
II. Timber, etc., removed from the Forests by consumers, etc.	..	6,885	510	..	920	1,450	2,937	3,841	2,029	18,572
III. Confiscated, drift and waif wood.	..	3	5	..	..	13	60	3	23	107
V. Rent of leased forests and payments to shareholders in forests managed by Government.	..	..	53	676	4,472	..	..	..	2,500	7,701
VI. Live-stock, stores, etc.—										
(*a*) Purchase of cattle.	..	..	1,658	721	4,760	..	..	..	2,178	9,317
(*b*) Feed and keep of cattle.	..	3,898	15,406	16,915	17,414	..	..	420	20,033	74,086
(*c*) Stores, tools and plant.	243	1,374	528	927	1,556	220	227	238	2,115	7,428
VII. Communications and buildings—										
(*a*) Roads and bridges.	..	3,063	7,267	3,512	5,299	8,397	10,338	3,642	5,083	46,601
(*b*) Buildings	313	904	5,460	2,916	7,604	8,442	9,383	8,229	5,297	48,548
(*c*) Other works ..	..	608	1,769	201	2,377	2,311	759	273	197	8,495
VIII. Demarcation, improvement and extension of forests—										
(*a*) Demarcation ..	..	783	659	350	328	2,278	2,168	444	127	7,137
(*b*) Cost of Forest Settlement; compensation for land and rights.	..	897	..	743	..	440	..	23	460	2,563
(*c*) Surveys { Local.	..	381	694	365	448	1,284	477	615	1,053	5,317
(*c*) Surveys { India.	..	..	..	..	..	..	..	..	..	..
(*d*) Working plans ..	..	..	9	— 417	226	..	..	..	..	— 182
(*e*) Sowing and planting.	675	167	1,263	7,412	2,846	272	266	590	2,258	15,749
(*f*) Protection from fire.	..	4,428	7,049	2,341	3,860	2,702	3,010	3,289	2,607	29,286
(*g*) Other works ..	..	1,352	1,767	1,768	1,276	2,940	4,506	5,612	1,501	20,722
IX. Miscellaneous—										
(*a*) Law charges ...	..	..	..	..	..	30	..	..	..	30
(*b*) Other charges ..	192	— 35	25	16	3,548	387	359	766	461	5,719
Total, A. Conservancy and Works.	1,423	56,839	54,499	54,359	79,298	45,052	57,799	30,107	59,939	4,39,315

Accountant-General's Office,
Madras, *5th September* 1913.

S. Venkataramanan,
for *Deputy Accountant-General.*

Note.—The correct figures against A-VIII (*d*) to (*g*) under South Malabar and total are as follow :—

	South Malabar.	Total.
A-VIII (*d*)	23	252
(*e*)	6,982	15,319
(*f*)	2,467	29,412
(*g*)	1,632	20,586

The corrections are due to the readjustment of certain erroneous debits of June 1912 adjusted by the Accountant-General in this return while they had been already adjusted in the return for 1911–12.

Summary of Expenditure of the different districts for the Forest year 1912-13—*cont.*

Budget heads.	Direction.	South Canara.	North Malabar.	South Malabar.	The Nilgiris.	Kollegal.	North Coimbatore.	Central Coimbatore.	South Coimbatore.	Total.
1	2	3	4	5	6	7	8	9	10	11
WESTERN CIRCLE—*cont.*	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
B. Establishments.										
Brought forward, Total A. "Conservancy and Works."	1,423	56,839	54,499	54,359	79,298	45,052	57,799	30,107	59,939	4,39,315
I. Salaries—										
(*a*) Conservators ..	20,400	..	..	..	..	..	..	..	..	20,400
(*b*) Superior officers ..	1,044	10,362	16,200	11,013	20,843	3,413	17,191	4,306	14,400	98,772
(*c*) Subordinate Forest and Depot establishments.	3,660	17,128	14,363	7,984	21,026	7,298	12,758	9,292	10,462	1,03,971
(*d*) Office establishments.	9,805	7,224	6,311	4,794	6,324	3,692	5,639	4,324	5,517	53,630
(*e*) Bonus	..	15	..	..	..	13	..	..	..	28
II. Travelling allowances—										
(*a*) Conservators ..	2,568	..	..	..	..	..	..	..	..	2,568
(*b*) Superior officers ..	..	1,867	1,329	2,434	1,795	1,847	2,292	1,054	2,313	14,931
(*c*) Subordinate Forest and Depot establishments.	507	4,449	3,081	3,396	5,101	1,813	3,169	2,724	2,089	26,329
(*d*) Office establishments.	574	1,548	1,197	717	918	773	853	927	764	8,271
III. Contingencies—										
(*a*) Rents, rates and taxes.	72	114	151	16	958	620	33	37	115	2,116
(*b*) Official postage and service telegrams.	535	1,604	698	503	640	498	1,190	468	1,158	7,294
(*c*) Telphone charges ..	..	..	..	..	..	..	..	..	..	..
(*d*) Sundries ..	7,923	1,718	2,615	1,785	1,604	2,298	1,580	1,048	1,695	22,336
Total, B. "Establishments" ..	47,158	46,029	45,945	32,642	59,209	22,265	44,705	24,180	38,513	3,60,646
Grand Total of Expenditure A. and B.	48,581	1,02,868	1,00,444	87,001	1,38,507	67,317	1,02,504	54,287	98,452	7,99,961

ACCOUNTANT-GENERAL'S OFFICE,
MADRAS, *5th September* 1913.

S. VENKATARAMANAN,
for *Deputy Accountant-General.*

SUMMARY of receipts and expenditure during 1912-13 for each Circle and for the Presidency compiled in the Board's office from Accountant-General's statements.

Budget heads.	Northern Circle.	Central Circle.	Southern Circle.	Western Circle.	Grand total, Presidency.	
					1912-13.	1911-12
1	2	3	4	5	6	7
RECEIPTS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Timber and other produce removed from the forests by Government Agency—						
(a) Timber	89,840	20,459	5,731	2,27,472	3,43,502	3,63,970
(b) Firewood, etc.	79,643	63,187	38,001	97,907	2,78,738	7,68,516
(c) Bamboos	44,878	1,885	397	11,284	56,444	97,124
(d) Sandalwood	..	3,940	1,64,178	1,01,752	2,71,870	1,43,043
(e) Grass and other minor produce.	5,110	19,115	785	29,395	54,405	52,066
Total, I ..	2,19,471	1,08,586	2,09,092	4,67,810	10,04,959	14,25,719
II. Timber and other produce removed from the forests by consumers—						
(a) Timber	1,06,003	93,492	98,245	53,526	3,51,266	2,79,002
(b) Firewood and charcoal ..	77,331	1,26,970	4,10,744	52,947	6,67,992	5,08,814
(c) Bamboos	72,805	10,881	99,542	22,476	2,05,704	2,03,785
(d) Grazing and fodder grass ..	1,28,898	2,60,729	2,18,586	83,296	6,91,509	6,32,015
(e) Other produce	95,640	2,83,960	2,33,008	40,884	6,53,492	7,08,038
(f) Tree-owners' fees	36,274	57,770	11,513	2,257	1,07,814	1,09,457
(g) Other items	13	524	641	..	1,178	924
(h) Commutation fees	2,222	..	..	..	2,222	2,761
Total, II ..	5,19,186	8,34,326	10,72,279	2,55,386	26,81,177	24,44,796
III. Confiscated drift and waifwood ..	12,335	1,445	1,835	2,570	18,185	14,740
IV. Revenue from forests not managed by Government.	..	..	..	..	..	..
V. Miscellaneous—						
(a) Fines and forfeitures ..	20,388	68,341	1,10,658	28,045	2,27,432	2,07,700
(b) Other sources	11,816	7,465	14,328	1,53,409	1,87,018	1,44,840
Total, V ..	32,204	75,806	1,24,986	1,81,454	4,14,450	3,52,540
Grand Total, Presidency ..	7,83,196	10,20,163	14,08,192	9,07,220	41,18,771	42,37,795
EXPENDITURE.						
1. Refunds and drawbacks	8,629	6,603	7,019	2,925	25,176	34,288
A. Conservancy and Works.						
I. Timber and other produce removed from the forests by Government Agency—						
(a) Timber	35,234	6,384	2,741	37,034	81,393	94,509
(b) Firewood, etc.	32,452	37,598	17,676	64,057	1,51,783	4,51,167
(c) Bamboos	24,591	994	148	6,200	31,933	49,120
(d) Sandalwood	..	709	8,707	14,679	24,095	34,603
(e) Grass and other minor produce.	6,392	11,457	235	10,149	28,233	30,857
Total, A-I ..	98,669	57,142	29,507	1,32,119	3,17,437	6,60,256
II. Timber and other produce removed from the forests by consumers, etc.	55,471	32,911	23,291	18,572	1,30,245	1,21,777
III. Confiscated drift and waifwood.	1,912	54	15	107	2,088	1,904
V. Rent of leased forests and payments to shareholders in forests managed by Government.	474	8,000	37	7,701	16,212	18,043
VI. Live-stock, stores, tools and plant—						
(a) Purchase of cattle ..	1,261	1,044	..	9,317	11,622	10,129
(b) Feed and keep of cattle ..	7,549	253	118	74,086	82,006	1,00,989
(c) Stores, tools and plant ..	9,917	9,564	3,253	7,428	30,162	45,573
Total, A-VI ..	18,727	10,861	3,371	90,831	1,23,790	1,56,691

Summary of receipts and expenditure during 1912-13 for each Circle and for the Presidency compiled in the Board's office from Accountant-General's statements—*cont.*

Budget heads.	Northern Circle.	Central Circle.	Southern Circle.	Western Circle.	Grand total, Presidency.	
					1912-13.	1911-12.
1	2	3	4	5	6	7
EXPENDITURE—*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
A. Conservancy and Works—cont.						
VII. Communications and buildings—						
(*a*) Roads and bridges ..	35,887	14,271	35,644	46,601	1,32,403	1,44,618
(*b*) Buildings	49,113	51,816	57,642	48,548	2,07,119	1,95,918
(*c*) Other works	5,605	3,897	3,788	8,495	21,785	23,529
Total, A-VII ..	90,605	69,984	97,074	1,03,644	3,61,307	3,64,065
VIII. Demarcation, etc.—						
(*a*) Demarcation	11,941	7,839	6,455	7,137	33,372	44,193
(*b*) Cost of forest settlement.	828	8,600	813	2,563	12,804	31,844
(*c*) Surveys (1) Local ..	10,626	8,474	6,527	5,317	30,944	24,143
(2) India ..	..	..	..	..	..	737
(*d*) Working-plans	1	— 2	..	— 182	— 183	3,070
(*e*) Sowing and planting ..	75,627	54,758	24,193	15,749	1,70,327	2,07,191
(*f*) Protection from fire ..	57,561	28,088	15,994	29,286	1,30,929	1,28,022
(*g*) Other works	15,124	79,360	73,324	20,722	1,89,030	1,68,272
Total, A-VIII ..	1,71,708	1,87,617	1,27,306	80,592	5,67,223	6,07,472
IX. Miscellaneous—						
(*a*) Law charges	..	651	24	30	705	1,909
(*b*) Other charges	1,608	3,267	757	5,719	11,351	6,462
Total, A-IX ..	1,608	3,918	781	5,749	12,056	8,371
Total, A. Conservancy and Works, including Refunds and Drawbacks.	4,47,803	3,77,090	2,88,401	4,42,240	15,55,534	19,72,807
B. Establishments.						
I. Salaries—						
(*a*) Conservators	22,800	20,843	18,000	20,400	82,043	86,002
(*b*) Superior officers	90,536	83,750	95,871	98,772	3,68,929	3,83,354
(*c*) Subordinate forest and depôt establishments.	1,20,184	1,15,638	1,10,234	1,03,971	4,50,027	4,44,600
(*d*) Office establishments ..	55,245	56,724	51,502	53,630	2,17,101	208,857
(*e*) Deputation allowances ..	71	8	161	28	268	11,796
Total, B-I ..	2,88,836	2,76,963	2,75,768	2,76,801	11,18,368	11,34,609
II. Travelling allowances—						
(*a*) Conservators	3,273	1,995	2,285	2,569	10,121	8,113
(*b*) Superior officers	16,764	10,521	11,986	14,931	54,202	58,193
(*c*) Subordinate forest and depôt establishments.	35,839	31,960	29,711	26,329	1,23,839	1,20,136
(*d*) Office establishments ..	13,001	10,978	8,762	8,271	41,012	40,400
Total, B-II ..	68,877	55,454	52,744	52,099	2,29,174	2,26,842
III. Contingencies—						
(*a*) Rents, rates and taxes ..	1,767	1,528	1,293	2,116	6,704	7,808
(*b*) Official postage and telegrams.	10,230	10,769	12,224	7,294	40,517	40,239
(*c*) Sundries	27,472	23,029	19,023	22,336	91,860	64,136
Total, B-III ..	39,469	35,326	32,540	31,746	1,39,081	1,12,183
Total, B. Establishments ..	3,97,182	3,67,743	3,61,052	3,60,646	14,86,623	14,73,634
Grand Total, Expenditure including Refunds and Drawbacks.	8,44,985	7,44,833	6,49,453	8,02,886	30,42,157	34,46,441
Surplus	— 61,789	+ 2,75,330	+ 7,58,739	+104,334	+ 10,76,614	+ 7,91,354
Total ..	7,83,196	10,20,163	14,08,192	9,07,220	41,18,771	42,37,795

ANNUAL FORM No. 81.

Forest Department, Madras Presidency.

OUTSTANDINGS and Liabilities on account of Contractors and Disbursers for the Forest year 1912–13.

District.	Department Debtor.			Department Creditor.			Balance due.	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To Department (Outstandings).	By Department (Liabilities).
Northern Circle.		RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	
Conservator, Northern Circle.	..	2,466 9 5	2,466 9 5	146 2 4	2,446 0 11	2,592 3 3	125 9 10	..
Ganjām	..	91,067 0 2	91,067 0 2	2,972 5 1	91,009 2 5	93,981 7 6	2,914 7 4	..
Vizagapatam	..	52,676 14 10	52,676 14 10	1,406 6 0	53,067 11 0	54,474 1 0	1,797 2 2	..
Gōdāvari, Upper	..	53,695 1 9	53,695 1 9	4,972 2 6	50,372 2 1	55,344 4 7	1,649 2 10	..
Do. Lower	..	73,398 1 4	73,398 1 4	4,440 9 4	71,022 7 11	75,463 1 3	2,064 15 11	..
Kistna	..	54,617 13 2	54,617 13 2	2,893 12 5	52,236 8 5	55,130 4 10	512 7 8	..
Kurnool, East	..	90,001 4 8	90,001 4 8	2,066 10 4	90,010 8 3	92,077 2 7	2,075 13 11	..
Do. South	..	1,63,568 2 0	1,63,568 2 0	2,707 9 4	1,63,404 4 2	1,66,111 13 6	2,543 11 6	..
Do. West	..	2,48,254 2 9	2,48,254 2 9	4,753 0 11	2,45,953 7 10	2,50,706 8 9	2,452 6 0	..
Total ..	..	8,29,745 2 1	8,29,745 2 1	26,358 10 3	8,19,522 5 0	8,45,880 15 3	16,135 13 2	..
Central Circle.								
Conservator, Central Circle..	..	909 12 11	909 12 11	63 11 10	939 9 0	1,003 4 10	93 7 11	..
Guntūr	..	85,076 3 8	85,076 3 8	1,475 7 11	84,725 4 10	86,200 12 9	1,124 9 1	..
Nellore	..	78,964 7 2	78,964 7 2	1,039 4 9	79,518 3 6	80,557 8 3	1,593 1 1	..
Cuddapah, North	..	62,449 14 2	62,449 14 2	1,561 2 11	61,616 12 6	63,177 15 5	728 1 3	..
Do. East	..	99,260 0 3	99,260 0 3	3,217 4 6	97,494 5 2	1,00,711 9 8	1,451 9 5	..
Bellary	..	1,17,852 9 8	1,17,852 9 8	3,486 14 1	1,17,943 12 11	1,21,430 11 0	3,578 1 4	..
Anantapur	..	90,400 11 9	90,400 11 9	1,931 1 1	90,160 14 1	92 091 15 2	1,691 3 5	..
Chittoor	..	72,505 6 7	72,505 6 7	1,143 12 3	72,788 1 5	73,931 13 8	1,426 7 1	..
Chingleput	..	33,948 7 3	33,948 7 3	571 13 6	34,218 2 3	34,789 15 9	841 8 6	..
Total ..	..	6,41,367 9 5	6,41,367 9 5	14,490 8 10	6,39,405 1 8	6,53,895 10 6	12,528 1 1	..
Southern Circle.								
Conservator, Southern Circle.	..	748 10 2	748 10 2	81 14 0	721 11 3	803 9 3	54 15 1	..
North Vellore	..	50,345 11 7	50,345 11 7	585 4 3	50,502 7 3	51,087 11 6	741 15 11	..
South do.	..	67,039 12 2	67,039 12 2	2,058 7 7	65,946 12 8	68,005 4 3	965 8 1	..
South Arcot	..	49,990 3 7	49,990 3 7	1,293 2 3	49,322 14 11	50,616 1 2	625 13 7	..
North Salem	..	62,055 14 3	62,055 14 3	2,759 10 6	60,670 0 4	63,429 10 10	1,373 12 7	..
South do.	..	59,985 1 10	59,985 1 10	1,612 11 0	60,097 2 9	61,709 13 9	1,724 11 11	..
Trichinopoly	..	65,178 14 11	65,178 14 11	883 6 3	65,965 13 5	66,849 3 8	1,670 4 9	..
Madura	..	1,16,384 11 5	1,16,384 11 5	2,832 1 5	1,18,852 2 9	1,21,684 4 2	5,299 8 9	..
Tinnevelly *cum* Ramnad ..	..	55,211 2 11	55,211 2 11	1,247 8 11 *129 6 6	56,393 6 0	57,770 5 5	2,559 2 6	.. ..
Total .	..	5,26,940 2 10	5,26,940 2 10	13,483 8 8	5,28,472 7 4	5,41,956 0 0	15,015 13 2	..
Western Circle.								
Conservator, Western Circle.	..	835 5 7	835 5 7	31 14 3	814 14 9	846 13 0	11 7 5	..
South Canara	..	1,19,634 4 5	1,19,634 4 5	2,592 12 2	1,19,551 10 9	1,22,144 6 11	2,510 2 6	..
North Malabar	..	84,283 1 1	84,283 1 1	1,939 4 5	87,275 9 9	89,214 14 2	4,931 13 1	..
South do.	..	68,014 6 10	68,014 6 10	3,218 4 10	66,975 11 9	70,194 0 7	2,179 9 9	..
The Nilgiris	..	1,00,989 11 10	1,00,989 11 10	3,620 0 7	1,04,027 2 7	1,07,647 3 2	6,657 7 4	..
Kollegal	..	72,081 0 3	72,081 0 3	3,493 2 9	71,512 9 3	75,005 12 0	2,924 11 9	..
North Coimbatore	..	88,991 10 6	88,991 10 6	2,431 3 0	89,808 3 9	92,239 6 9	3,247 12 3	..
Central do.	..	51,390 13 11	51,390 13 11	1,323 2 7	51,292 7 11	52,615 10 6	1,224 12 7	..
South do.	..	81,035 11 7	81,035 11 7	3,197 13 3	80,137 11 10	83,335 9 1	2,299 13 6	..
Total ..	..	6,67,256 2 0	6,67,256 2 0	21,847 9 10	6,71,396 2 4	6,93,243 12 2	25,987 10 2	..
Grand Total, Presidency ..	..	26,65,309 0 4	26,65,309 0 4	76,180 5 7	26,58,796 0 4	27,34,976 5 11	69,667 5 7	..

* Ramnad figure.

ACCOUNTANT-GENERAL'S OFFICE,
MADRAS, 1*st September* 1913.

S. VENKATARAMANAN,
for *Deputy Accountant-General.*

Annual Form No. 82.

Forest Department, Madras Presidency.

Revenue received and outstandings on account of Revenue during 1912-13.

District.	Particulars.	Outstandings at commencement of the year.	Value of sales and other revenue during the year.	Total.	Amount realized during the year.	Balance due to the department at end of year.
Northern Circle.		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Direction	Timber and other forest produce.	..	157 0 0	157 0 0	157 0 0	..
Ganjam	Do.	(*a*) 3 284 8 9	69,363 13 3	72,648 6 0	66,753 0 0	(*f*) 5,895 6 0
Vizagapatam	Do.	1,513 2 0	50,983 10 9	52,496 12 9	49,247 0 0	(*g*) 3,249 12 9
Godavari, Upper	Do.	470 13 7	60,586 15 2	61,057 12 9	60,096 0 0	(*h*) 961 12 9
Do. Lower	Do.	(*b*) 4,590 5 4	2,08,996 6 8	2,13,586 12 0	1,84,391 0 0	(*i*) 29,195 12 0
Kistna	Do.	(*c*) 6,807 12 6	1,02,443 11 6	1,19,251 8 0	95,138 0 0	(*j*) 24,113 8 0
Kurnool, East ..	Do.	(*d*) 507 11 7	72,793 8 5	73,301 4 0	73,280 0 0	(*k*) 21 4 0
Do. South	Do.	10,915 11 6	96,948 8 1	1,07,859 3 7	89,002 0 0	(*l*) 18,857 3 7
Do. West	Do.	130 6 6	1,69,364 5 11	1,69,494 12 5	1,65,132 0 0	(*m*) 4,362 12 5
	Total ..	(*e*) 38,220 7 9	8,31,632 15 9	8,69,853 7 6	7,83,196 0 0	86,657 7 6
Central Circle.						
Direction	Timber and other produce.	..	..	..	..	..
Bellary	Do.	31,015 13 7	2,16,744 14 7	2,47,760 12 2	1,53,570 0 0	94,190 12 2
Anantapur	Do.	81,479 15 5	4,28,615 6 8	5,10,095 6 1	1,75,417 0 0	3,34,678 6 1
Guntur	Do.	4,744 14 4	1,79,506 2 1	1,84,251 0 5	1,79,211 0 0	5,040 0 5
North Cuddapah	Do.	3,202 1 7	56,309 14 7	59,512 0 2	57,291 0 0	2,221 0 2
East do.	Do.	6,780 9 1	83,885 5 0	90,665 14 1	84 697 0 0	5,968 14 1
Nellore	Do.	75,479 2 6	1,92,445 13 6	2,67,925 0 0	2,00,382 0 0	67,543 0 0
Chingleput	Do.	5,551 13 11	67,277 1 3	72,828 15 2	64,200 0 0 (*n*) +233 1 2	8,395 14 0
Chittoor	Do.	23,173 10 9	97,102 15 11	1,20,276 10 8	1,05,395 0 0	14,881 10 8
	Total ..	2,31,428 1 2	13,21,887 9 7	15,53,315 10 9	10,20,163 0 0 (*n*) +233 1 2	5,32,919 9 7
Southern Circle.						
Direction	Timber and other forest produce.		3 0 0	3 0 0	3 0 0	..
Vellore, North ..	Do.	20,419 1 9	1,65,591 2 4	1,86,010 4 1	1,46,969 0 0 (*o*)+ 0 11 8	39,040 8 5
Do. South	Do.	80,797 1 10	2,86,787 11 6	3,67,584 13 4	2,82,376 0 0 (*o*)+ 33 5 4	85,175 8 0
Arcot, South	Do.	14,826 4 1	2,19,053 3 11	2,33,879 8 0	2,02,454 0 0 (*o*)+ 7 0 0	31,418 8 0
Salem, North	Do.	16,674 12 1	1,36,944 2 9	1,53,618 14 10	1,36,403 0 0	17,215 14 10
Do. South	Do.	14,035 7 0	1,39,271 9 4	1,53,307 0 4	1,20,294 0 0 (*o*)+40 0 2	32,973 0 2
Trichinopoly	Do	17,559 6 8	2,00,863 8 8	2,18,422 15 4	1,90,520 0 0 (*o*)+ 1 8 0	27,901 7 4
Madura	Do.	20,359 2 3	1,91,431 7 8	2,11,790 9 11	1,92,561 0 0 (*o*)+ 1 6 7	19,228 3 4
Tinnevelly	Do.	15,253 1 11	1,42,495 4 4	1,57,748 6 3	1,36,612 0 0 (*o*)+44 1 5	21,092 4 10
	Total ..	1,99,924 5 7	14,82,441 2 6	16,82,365 8 1	14,08,192 0 0 (*o*)+128 1 2	2,74,045 6 11
Western Circle.						
Direction	Timber and other forest produce.	..	276 10 11	276 10 11	276 10 11	..
South Canara	Do.	14,573 8 11 — 19 5 11	1,33,690 8 5	1,48,244 11 5	1,43,018 0 0 * 8 0 0	5,218 11 5
Malabar, North	Do.	5,307 7 10	92,572 14 4	97,880 6 2	81,380 0 0	16,500 6 2
Do. South .. .	Do.	2,023 1 0 —1,529 0 0	1,46,441 14 6	1,46,935 15 6	1,45,904 0 0	1,031 15 6
The Nilgiris	Do.	2,128 13 0	75,136 3 3	77,265 0 3	71,288 0 0	5,977 0 3
Kollegal	Do.	50 0 5 — 6 4 0	1,07,628 10 2	1,07,672 6 7	1,07,461 0 0	211 6 7
Coimbatore, North	Do.	0 0 0	1,20,774 0 8	1,20,774 0 8	1,18,035 0 0	2,739 0 8
Do. Central	Do.	13,946 11 2 —509 9 7	67,310 7 7	80,747 9 2	64,990 0 0	15,757 9 2
Do. South	Do.	1,132 8 3 — 9 8 0	1,76,315 3 9	1,77,438 4 0	1,74,868 0 0 * 457 14 0	2,112 6 0
	Total ..	39,162 2 7 — 2,073 11 6	9,20,146 9 7	9,57,235 0 8	9,07,220 10 11 * 465 14 0	49,548 7 9
	Grand total Presidency.	5,06,661 5 7	45,56,138 5 5	50,62,769 11 0	4119,598 11 3	9.43,170 15 9

* Written off the accounts.

(*a*) Includes Rs. 1,096-11-6 being balance of Revenue on lands not managed by the Forest Department.
(*b*) Do. Rs. 0-0-5 adjusted in the Board's office last year for which individualwar details are not known.
(*c*) Excludes Rs. 220-0-0 do. do. do.
(*d*) Do. Rs. 0-0-10 do. do. do.
(*e*) Includes Rs. 876-11-1 for which please see notes (*a*) (*b*). (*c*) and (*d*) above.
(*f*) Do. Rs. 2,608-0-0 due in 1913-14; Rs. 1,308-3-5 covered by deposit and Rs 483-13-9 relating to lands not managed by the Forest Department.
(*g*) Do. Rs. 2,662-4-9 .. .. .. and Rs. 33-12-0 reported to be irrecoverable.
(*h*) Do. ,, 650-0-0 do.
(*i*) Do. ,, 28,093-4-0 do.
(*j*) Do. ,, 24,113-8-0 do.
(*k*) Do. ,, 21-4-0 do.
(*l*) Do. ,, 14,892-10-8 do. Rs. 174-4-2 do.
(*m*) Do. do. ,, 110-8-0 do.

(*n*) Written off in Board's Proceedings, Forest Mis. No. 1795, dated 6th December 1912.
(*o*) Amounts written off under Conservator's sanction.

Note Western Circle.—Deductions in column 3 are on account of erroneous demands and collections in previous year omitted to be adjusted towards outstandings. Out of the total outstandings of Rs. 49,548-7-9 the amount actually due on or before 30th June 1913 was Rs. 21,001.

ANNUAL FORM No. 83.

Forest Department, Madras Presidency.

FINANCIAL results of the year 1912-13.

District	Timber and other produce removed from the Forest by Government Agency.		Other Revenue.		Formation, Protection and Improvement of Forests.	Total.	
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.
Northern Circle.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Ganjam	19,020	24,346	47,746	38,865	40,148	66,766	1,03,359
Vizagapatam	22,464	21,724	26,797	32,018	17,644	49,261	71,386
Godavari, Upper ..	3,021	2,760	57,079	30,188	34,735	60,100	67,683
Do. Lower ..	16,140	7,401	1,68,272	58,757	25,807	1,84,412	91,965
Kistna	9,429	3,761	85,719	27,327	34,655	95,148	65,743
Kurnool, East ..	18,107	10,866	55,188	29,165	52,302	73,295	92,333
Do. South ..	46,064	44,543	42,964	25,678	71,425	89,028	1,41,646
Do. West ..	85,226	61,772	79,960	44,038	96,431	1,65,186	2,02,241
Total ..	2,19,471	7,173	5,63,725	2,86,036	3,73,147	7,83,196	8,36,356 + 8,629
Central Circle.							
Bellary	4,446	1,233	1,49,124	71,556	67,620	1,53,570	1,40,409
Anantapur	4,901	3,448	1,70,516	47,873	49,038	1,75,417	1,00,359
Guntur	26,253	20,535	1,52,958	41,287	37,142	1,79,211	98,964
Cuddapah, North ..	7,818	6,337	49,473	34,278	23,829	57,291	64,444
Do. East ..	29,896	23,871	54,801	50,214	23,735	84,697	97,820
Nellore	13,233	10,604	1,87,149	50,670	39,201	2,00,382	1,00,475
Chingleput	459	1,237	63,741	23,957	22,615	64,200	47,809
Chittoor	21,580	13,897	83,815	46,709	27,344	1,05,395	87,950
Total ..	1,08,586	81,162	9,11,577	3,66,544	2,90,524	10,20,163	7,38,230 * 6,603
Southern Circle.							
North Vellore ..	1,553	4,795	1,45,417	24,909	27,864	1,46,970	57,568
South do. ..	1,44,797	13,930	1,37,580	30,865	30,048	2,82,377	74,838
South Arcot	20,985	7,099	1,81,470	27,850	25,506	2,02,455	60,455
North Salem	21,389	16,428	1,15,014	32,659	35,815	1,36,403	84,902
South do.	4,413	8,766	1,15,881	30,510	32,183	1,20,294	71,459
Trichinopoly *cum* Tanjore.	6,125	11,522	1,84,395	48,445	31,024	1,90,520	90,991
Madura	9,372	22,187	1 83,189	42,845	65,821	1,92,561	1,30,853
Tinnevelly and Ramnad	458	6,490	1,36,154	39,526	25,352	1,36,612	71,368
Total ..	2,09,092	91,217	11,99,100	2,77,609	2,73,608	14,08,192	6,42,434 * + 7,019
Western Circle							
South Canara	66,420	53,746	76,632	38,850	17,879	1,43,052	1,10,475
Malabar, North ..	16,833	22,221	64,582	45,449	38,861	81,415	1,06,531
Do. South ..	1,36,838	55,821	8,640	6,025	31,228	1,45,478	93,074
The Nilgiris	37,292	83,236	34,031	22,747	38,711	71,323	1,44,694
Kollegal	73,696	19,601	33,800	14,000	39,815	1,07,496	73,416
Coimbatore, North ..	63,313	34,852	54,756	28,549	45,352	1,18,069	1,08,753
Do. Central ..	1,811	4,058	63,214	26,730	30,551	65,025	61,339
Do. South ..	71,607	33,271	1,03,755	47,016	24,317	1,75,362	1,04,604
Total ..	4,67,810	3,06,806	4,39,410	2,29,366	2,66,714	9,07,220	8,02,886
Grand Total, Presidency	10,04,959	6,56,358	31,13,812	11,59,555	12,03,993	41,18,771	30,42,157

* Refunds and drawbacks.

Annual Form No. 84.

Forest Department, Madras Presidency.

Part I.

Statement of elephants and other live-stock during 1912–13.

District.	On hand at the commencement of the year.		Number received during the year.	Number disposed of during the year.	On hand at the end of the year.		Total expenditure on maintenance during the year.
	Number.	Value.			Number.	Value.	
1	2	3	4	5	6	7	8
(1) Elephants.							
Northern Circle.							
		Rs.				Rs.	Rs.
Ganjam	3	5,450	..	..	3	5,450	2,013
Vizagapatam	1	1,500	..	..	1	1,500	1,042
Godavari, Upper	1	900	..	..	1	900	809
Kurnool, West	2	3,100	..	..	2	3,100	1,597
Total ..	7	10,950	..	..	7	10,950	5,461
Western Circle.							
Malabar, North	60	1,10,150	3	45	18	40,500	13,853
Do. South	27	45,900	10	4	33	1,04,200	15,175
The Nilgiris	16	28,050	36	4	48	90,500	18,682
Coimbatore, South ..	17	41,300	5	4	18	40,500	9,874
Total ..	120	2,25,400	54	57	117	2,75,700	57,584
Grand total. (Elephants), Presidency.	127	2,36,350	54	57	124	2,86,650	63,045
(2) Other live-stock.							
Northern Circle.							
Ganjam	2	50	..	..	2	50	61
Kurnool, South	12	240	22	2	32	1,626	1,986
Total ..	14	290	22	2	34	1,676	2,047
Central Circle.							
Chittoor	14	625	..	12	..	38	194
Southern Circle.							
Vellore, North	2	40	..	..	2	40	103
Western Circle.							
South Canara	72	4,122	..	15	57	3,960	4,582
Malabar, North	4	280	..	2	2	160	451
Do. South	25	1,018	1	1	25	1,013	1,887
The Nilgiris	16	1,000	12	3	25	1,500	3,491
Coimbatore, South	89	5,738	8	21	76	5,439	7,823
Total ..	206	12,158	21	42	185	12,072	18,234
Grand total (Other live stock), Presidency.	236	13,113	43	56	221	13,826	20,578

Statement of elephants and other live-stock during 1912–13—*cont.*

PART II.

District.	Names.	When purchased or otherwise obtained by Government.	Age.	How disposed of.
1	2	3	4	5
	ELEPHANTS GONE OFF DURING THE YEAR.			
	Northern Circle—Nil.			
	Central Circle—Nil.			
	Southern Circle—Nil.			
	Western Circle.			
			YRS.	
Malabar, North.	1. Tippu	Captured on 1st February 1910	15	Sold.
	2. Czarina	Do. 28th January ,, ...	31	
	3. Sultan	Do. 11th January ,, ...	5	
	4. Rutna	Do. 28th January ,, ...	6	
	5. Venus	Do. 5th June ,, ...	5	
	6. Sunder Lal ..	Do. 24th February 1911	13	
	7. Aurangazeb ..	Do. 20th June ,, ...	6	
	8. Borneo	Born on 20th January 1905	7	
	9. Jessie	Do. 20th October 1903	9	
	10. Reggie	Captured on 11th April 1907	6	
	11. Gunga	Do. 30th May ,, ...	6	
	12. Janaki	Do. 12th June ,, ...	7	
	13. Kuroki	Do. 19th February 1905	15	Transferred to South Malabar.
	14. Forester ..	Do. 15th March 1906	13	
	15. Hyder Ali ..	Do. 12th March ,, ...	12	
	16. Kali	Do. 27th June 1908	12	
	17. Port Arthur ..	Do. 30th January 1905	11	
	18. Saraswathi ..	Do. 16th April 1911	22	
	19. to 44. Nursery elephants.	....	..	Transferred to the Nilgiris.
	45. Calf (not named).	Captured on 13th March 1913	..	Escaped from the kraal.
Malabar, South.	1. Lydia	Purchased from the Chief Supply and Transport Department in March 1903 for Rs. 1,500.	62	Sold.
	2. Delhi	Captured on 3rd February 1912	1	
	3. Durbar	Do. do.	1	
	4. Nazim Pasha ..	Born on 23rd November ,, ...	..	Died.
The Nilgiris.	1. Madan Lal ..	Captured on 3rd March 1911	14	Died.
	2. Moti Lal ..	Do. 8th April 1912	4	
	3. Naziruddin ..	Do. 5th March ,, ...	5	
	4. Female (not named).	Do. 7th March 1913	30	
Coimbatore, South.	1. Juno	Captured on February 1886	35	Sold.
	2. Mary	Do. on 18th July 1911	1	
	3. Vengoli ..	Do. on 31st August ,, ...	2	
	4. Garudachi ..	Do. on 5th October ,, ...	36	

ANNUAL FORM No. 85.

Forest Department, Madras Presidency.

ABSTRACT showing the value of stores, tools and plant for 1912–13.

District.	Buildings.				Stores.				Total.				Difference in value.	
	On hand at the commencement of the year.		On hand at the end of the year.		On hand at the commencement of the year.		On hand at the end of the year.		On hand at the commencement of the year.		On hand at the end of the year.		In favour of the year.	Against the year.
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Northern Circle.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	Rs.	Rs.
Direction ..	1	750	1	740	345	2,872	319	3,094	346	3,622	320	3,834	212	..
Ganjām ..	119	49,639	139	58,961	(a)2,427	(b)9,821	(c)2,368	(d)8,544	2,546	59,460	2,507	67,505	8,045	..
Vizagapatam ..	72	9,422	77	10,593	1,184	2,731	1,254	3,081	1,256	12,153	1,331	13,674	1,521	..
Gōdāvari, Upper.	117	28,585	117	30,030	2,004	16,782	1,963	15,722	2,121	45,367	2,080	45,752	385	..
Gōdāvari, Lower.	176	68,097	156	52,560	2,266	12,177	1,929	9,521	2,442	80,274	2,085	62,081	..	18,198
Kistna ..	59	8,102	68	7,956	718	7,801	1,609	7,457	777	15,903	1,677	15,413	..	490
Kurnool, East.	18	20,545	20	21,360	2,870	7,364	2,883	7,054	2,888	27,909	2,903	28,414	505	..
Do. South.	30	28,440	49	32,072	2,840	12,458	3,996	11,818	2,870	40,898	4,045	43,890	2,992	..
Do. West.	89	44,123	89	97,352	* 4,683	* 10,608	6,022	13,192	4,772	54,731	6,141	1,10,544	55,813	..
Total ..	681	2,57,703	716	3,11,624	19,337	82,614	22,343	79,483	20,018	3,40,317	23,059	3,91,107	50,790	..
Central Circle.														
Direction ..	..	..	..	..	820	3,109	351	2,904	820	3,109	351	2,904	..	205
Bellary ..	67	43,458	67	60,238	2,546	9,516	2,502	7,861	2,613	52,974	2,569	68,099	15,125	..
Anantapur ..	32	37,068	39	42,457	1,647	6,078	1,809	6,711	1,679	43,146	1,848	49,168	6,022	..
Guntūr ..	47	7,079	40	6,062	1,642	10,576	1,927	11,286	1,689	17,655	1,967	17,348	..	307
North Cuddapah.	40	8,893	46	12,073	1,679	7,151	2,033	7,325	1,719	16,044	2,079	19,398	3,354	..
East Cuddapah.	68	* 15,241	71	17,448	1,109	7,196	1,439	9,862	1,177	22,437	1,510	27,310	4,873	..
Nellore ..	18	18,702	34	27,142	* 58,983	* 48,241	53,103	47,401	59,001	66,943	53,137	74,543	7,600	..
Chingleput ..	45	9,893	45	10,298	1,185 *	5,951 *	1,195	6,356	1,230	15,844	1,240	16,654	810	..
Chittoor ..	53	16,271	52	15,835	1,786	6,163	1,869	7,426	1,839	22,434	1,921	23,261	827	..
Total ..	370	1,56,605	394	1,91,553	71,397	1,03,981	66,228	1,07,132	71,767	2,60,586	66,622	2,98,685	38,099	..
Southern Circle.														
Direction ..	..	..	..	..	1,561	3,135	160	3,030	1,561	3,135	160	3,030	..	105
North Vellore.	41	11,477	41	11,477	1,299	3,874	1,538	5,012	1,340	15,351	1,579	16,489	1,138	..
South do.	44	27,211	52	34,748	3,784	8,411	3,603	8,619	3,828	35,622	3,655	43,367	7,745	..
South Arcot ..	69	18,381	47	20,211	1,510	5,315	1,268	3,819	1,579	23,696	1,315	24,030	334	..
North Salem ..	48	21,189	68	31,725	2,566	7,225	2,084	7,203	2,614	28,414	2,152	38,928	10,514	..
South do. ..	45	14,977	52	17,998	† 2,925	† 8,202	3,037	8,337	2,970	23,179	3,089	26,335	3,156	..
Trichinopoly ..	35	11,044	36	13,247	3,798	15,413	3,749	14,542	3,833	26,457	3,785	27,789	1,332	..
Madura ..	98	56,635	105	66,295	3,128	7,391	3,238	6,668	3,226	64,026	3,343	72,963	8,937	..
Tinnevelly *cum* Rāmnād.	84	45,361	82	43,046	1,773	4,371	1,892	4,614	1,857	49,732	1,974	47,660	..	2,072
Vernacular Training School.	..	..	..	..	317	1,685	316	1,553	317	1,685	316	1,553	..	132
Total ..	464	2,06,275	483	2,38,747	22,661	65,022	20,885	63,397	23,125	2,71,297	21,368	3,02,144	30,847	..
Western Circle.														
Direction ..	1	86	1	82	1,730	7,245	869	6,898	1,731	7,331	870	6,980	..	351
South Canara ..	56	24,091	53	24,399	1,892	11,272	1,950	10,823	1,948	35,363	2,003	35,222	..	141
Malabar, North	68	41,676	71	45,512	2,453	7,060	2,404	7,548	2,521	48,736	2,475	53,060	4,324	..
Do. South.	41	33,629	43	33,849	2,068	6,088	2,190	6,143	2,109	39,717	2,233	39,992	275	..
The Nilgiris ..	62	28,501	65	29,199	1,231	8,956	1,714	10,395	1,293	37,457	1,779	39,594	2,137	..
Kollegal ..	28	18,927	29	18,917	1,390	6,631	1,483	6,241	1,418	25,558	1,512	25,158	..	400
Coimbatore, North.	60	43,304	62	46,636	2,559	10,687	2,850	10,418	2,619	53,991	2,912	57,054	3,063	..
Do. Central	56	15,124	57	20,620	7,646	9,287	7,578	8,828	7,702	24,411	7,635	29,448	5,037	..
Do. South.	63	28,992	63	32,048	16,519	38,988	8,564	36,338	16,582	67,980	8,627	68,386	406	..
Vernacular Training School.	..	..	..	..	408	2,773	248	1,077	408	2,773	248	1,077	..	1,696
Total ..	435	2,34,330	444	2,51,262	37,896	1,08,987	29,850	1,04,709	38,331	3,43,317	30,294	3,55,971	12,654	..
Grand Total, Presidency.	1,950	8,54,913	2,037	9,93,186	151,291	3,60,604	139,306	3,54,721	153,241	12,15,517	141,343	13,47,907	1,32,390	

* Revised figure. † As revised by the Collector.

(a) Excludes 499 items belonging to the Parlakimedi Wahabs.
(b) Do. Rs. 2,050 being the cost of 499 items belonging to the Parlakimedi Wahabs.
(c) Do. 566 items belonging to the Parlakimedi Wahabs.
(d) Do. Rs. 2,265 being the value of 566 items belonging to the Parlakimedi Wahabs.

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

READ—the following paper :—

Proceedings of the Board of Revenue (Land Revenue), Forest No. 236, dated 18th November 1913.

The Hon'ble Mr. R. C. C. CARR, I.C.S.

The Board submits to Government the progress report of forest administration in the Madras Presidency for the year ending with 30th June 1913.

CONSTITUTION OF STATE FORESTS.

ALTERATION IN AREA.

2. Nearly 48 square miles, chiefly in Central Coimbatore and to a smaller extent in Vizagapatam, North Salem and Tinnevelly, were constituted reserved forests during the year. There were also the following changes in area : There was an increase of 6 square miles by reason of correct computation of areas in Nellore and Anantapur and of 2 square miles on account of the adoption of the areas given in the Survey of India maps in South Canara and Central Coimbatore, while there was a decrease of 9 square miles by disafforestation of forest areas in Anantapur, of 3 square miles by the adoption of the Survey of India figures in Lower Gōdāvari and of 3 square miles by correct computation of areas in Nellore. The net result of these changes was an increase of 41 square miles in the total area of reserved forests which stood at 18,641 square miles at the close of the year.

The area of reserved lands fell from 838 square miles to 825 square miles. About 110 square miles were notified under section 4 of the Forest Act chiefly in the districts of Upper Gōdāvari and Central Coimbatore and 25 square miles were added by the adoption of the Survey of India figures in Kollegal, while 48 square miles were notified under section 16. Two square miles were excluded at settlement and 98 square miles were transferred to unreserved land in South Canara. In the Parlākimedi maliahs, four blocks of an aggregate area of 12,886 acres in the Parlākimedi range and one block of an area of 18,000 acres in the Chandragiri range were added to the reserved lands by the Collector. The total number of blocks selected up to the end of the year under report in both the Parlākimedi and Chandragiri ranges was 16, aggregating 138 square miles.

FOREST SETTLEMENT.

3. It will be seen from appendix B that 656 square miles notified under section 4 of the Forest Act remained to be notified under section 16 of the Forest Act at the end of the year. The settlement of 457 square miles has been practically completed, leaving a balance of 199 square miles still to be done. As in previous years, settlement work was mostly carried out by Revenue Divisional Officers. The Special Deputy Collector appointed to revise the boundaries of some of the existing reserves in Madura continued his work throughout the year and Government have sanctioned the retention of his services for a further period of two years for the investigation of certain reserves in Kodaikānal range. In G.O. No 770, Revenue, dated 14th March 1913, Government sanctioned the employment of a Special Deputy Collector for forest settlement work in Coimbatore and he has prepared the revised draft notification under section 16 for the Madeshwaramalai block in Kollegal having an area of 246 square miles.

Demarcation.

4. The total length of boundaries at the close of the year was 36,952 miles (or 433 miles less than in the previous year), of which 1,777 miles do not require artificial demarcation, 34,212 miles were previously demarcated with artificial boundary marks, and 275 miles were newly done during the year under review against 522 miles in 1911–12, leaving 963 miles chiefly in Ganjām, Madura and Kollegal still to be demarcated. The forests in Madura and Coimbatore are being demarcated in accordance with the verification of boundaries by the Special Deputy Collectors appointed for the purpose, and considerable progress was made during the year. The Conservator, Central Circle, reports that permanent demarcation of reserves in the circle is capable of much improvement and that the matter is receiving his attention.

The length of old boundaries repaired during the year was 19,314 miles against 17,583 miles in the previous year and the length of boundaries cleared free of cost by subordinates rose from 10,293 miles to 13,233 miles. The progress made was satisfactory.

Excluding Rs. 8,544 spent on the demarcation of boundaries in connection with dupati survey in Upper Gōdāvari division, the average cost per mile of fresh demarcation rose from Rs. 24–6–3 to Rs. 35–12–1, while the cost of repairs fell from Rs. 2–8–3 to Rs. 2–7–5. The increased rate for permanent demarcation was mainly contributed by Madura and Kollegal where the boundaries are substantially demarcated in accordance with the verification of forest boundaries corrected by the Special Forest Settlement Officers.

Surveys.

5. The Survey of India Party No. VII surveyed on the 2 inch = 1 mile scale two reserves in Kollegal aggregating 11·61 square miles. The index maps undertaken for Upper Gōdāvari division have been published, while those for the remaining districts of the Northern Circle are reported to be under different stages of completion. The Bhadrāchalam dupati survey was brought to a close during the year, 89 villages having been completed. The survey officer deputed to survey the boundaries of estates newly leased out on the Anamalais worked for about two months and had then to stop further work on account of the approach of the monsoon. He will resume and complete the work during the present cold weather. The departmental surveys of importance carried out during the year were the survey of 92 miles in Chokkapad forests in Ganjām, alignment of 115 miles of a 700-ft. level line in Upper Gōdāvari division and the survey of 65 miles of boundaries of reserved forests in Kollegal. Miscellaneous work such as survey of coupes, alignment of roads, cutting of fire lines, and verification of boundaries and preparation of stock and working plan maps was done by departmental surveyors. The Special Forest Map Officer Mr. Descubes prepared the reference maps of the forest divisions of Kurnool, Bellary, Anantapur, North Malabar, South Arcot, South Vellore and of part of the map of Trichinopoly *cum* Tanjore. The quality of the work is stated by the Conservator, Southern Circle, to be good and the progress satisfactory. The Government of India have sanctioned his re-employment up to the end of February 1915 for the purpose of completing the revision of the reference maps of the Presidency.

MANAGEMENT OF FORESTS.

(1) Regulation of Management.

Working Plans.

6. During the year working plans for 390 square miles were sanctioned and plans were either under preparation or revision for 2,368 square miles. As observed in the reviews of previous years, this important subject has not received sufficient attention owing to a dearth of officers. This question is now engaging the attention of the Board and the Government. As a beginning Mr. C. C. Wilson, Assistant Conservator of Forests, has just been posted as Working Plans Officer, South Vellore, to deal with sandalwood on the Javadi hills in which Government possess a

very valuable property. The working plan for the Marrigudem range of Upper Gōdāvari was approved tentatively during the year subject to report on its working and to revision if necessary after five years. The preliminary working plan for the forests of the Bhadrāchalam range compiled by the District Forest Officer, Upper Gōdāvari, was found to be too elaborate and was returned to the Collector of Gōdāvari for the preparation of a purely tentative plan. Revised working plans for the Yerramalais and for the Beypore tope in South Malabar and a preliminary working plan for a portion of Gundlabrahmeswaram range were sanctioned during the year. The working plan for the coast range in South Arcot district referred to in the previous year's review has been abandoned as Government have approved of the Board's proposal to get rid of the casuarina planting business and leave it to private enterprise. Steps are being taken to have the existing casuarina reserves disafforested and the land and standing stock sold. The plantations in South Arcot have been disafforested already and similar steps are being taken for the disposal of the casuarina plantations in Nellore district. In Kurnool South and Vizagapatam the preparation of plans was held in abeyance pending receipt of orders on the Forest Committee's report. The Conservator of the Central Circle in which a regrettable want of control over working plans was noticed in the previous report, points out that control is improving but that much remains to be accomplished, and that many of the existing plans need thorough revision. In North Salem M.R.Ry. J. Sadasiva Ayyar, Avargal, Extra Assistant Conservator of Forests, was posted during the year for preparation of working plans and is said to have practically completed a working plan for Dharmapuri range (area 164½ square miles).

7. The annual plans of operations were generally adhered to.

(2) Communication and Buildings.

8. The following statement compares the expenditure during the year on the construction and maintenance of roads, bridges and buildings in the four circles with that of the preceding year :—

	Roads and bridges		Buildings.	
	1911-1912.	1912-1913.	1911-1912.	1912-1913.
	Rs.	Rs.	Rs.	Rs.
Northern Circle	41,561	35,587	59,637	49,113
Central Circle	4,473	14,271	53,534	51,816
Southern Circle	36,076	35,644	32,967	57,642
Western Circle	62,508	46,601	49,780	48,548
Total ..	1,44,618	1,32,403	1,95,918	2,07,119

The total expenditure on roads and bridges fell by Rs. 12,215 but that on buildings rose by Rs. 11,201. There was a marked increase in expenditure incurred in roads and bridges in the Central Circle and in that incurred on buildings in the Southern Circle. Without roads and proper buildings in the way of subordinates lines and rest-houses, the proper inspection, protection and working of the forests is almost impossible. Expenditure sensibly invested on such works should generally repay itself in a few years' time. Having due regard to progress and improved efficiency of working, the Board fears it is not possible to advocate any serious curtailment of expenditure at present under either of these important heads. In his inspection note of January last, the Inspector-General of Forests to the Government of India has, while deprecating wasteful and objectless expenditure on roads and buildings, at the same time emphasized the necessity for liberal grants for all well-considered schemes if the forests in Madras are to be properly developed and brought under an efficient system of control.

The necessity for care in selecting objects on which money can be usefully spent has been impressed upon Conservators. The tramways in Nellore and South Coimbatore worked at a profit. The proposed Wynaad tramway was abandoned. A scheme for extracting timber from the Tekkadi leased forests and from the Government reserves on the slopes of the Anamalais was investigated by a special

officer in conjunction with an officer deputed for this purpose by the Cochin Darbar. The idea was to utilize the Cochin forest tramway which is now working not far from the forests in question. It was found, however, that the produce of these areas could be more profitably extracted on the Coimbatore side and a scheme is now under investigation for a tramway and inclined plane to provide the necessary outlet.

The telephone lines erected in South Coimbatore were most useful and about 400 messages were sent during the year. It is interesting to note that almost the first message saved 24 hours' delay in taking an elephant out of a pit.

Miscellaneous works.

9. The expenditure under this head decreased from Rs. 23,529 to Rs. 21,785. The works consisted as usual in fencing compounds and reserves, construction of and repairs to tanks and wells. In Trichinopoly, a dam was built to improve the water-supply at Kulivalavu. In North Malabar, temporary and permanent dams were constructed to train two streams for floating timber, fuel and bamboos. In the Nilgiris a pipe line for supply of water to Kargudi camp was aligned and pipes and fittings were purchased.

(3) Protection of Forests.

10. The following table compares the forest offences reported during the year with those in 1911–12 and with the average of the three years ending 1911–1912 :—

—	Injury to forests by fire.		Unauthorised felling and removal of forest produce.		Unauthorised grazing.		Other offences.		Total.		Average. for three years ending 1911–1912.
	1911–1912.	1912–1913.	1911–1912.	1912–1913.	1911–1912.	1912–1913.	1911–1912.	1912–1913.	1911–1912.	1912–1913.	
A. Cases taken to court ..	84	65	3,386	3,526	1,587	1,583	342	321	5,399	5,495	4,993
B. Cases compounded ..	66	63	14,142	15,104	6,676	6,829	746	734	21,630	22,730	20,158
C. Undetected cases	1,119	949	438	524	381	179	28	15	1,966	1,667	1,769
Total ..	1,269	1,077	17,966	19,154	8,644	8,591	1,116	1,070	28,995	29,892	26,920

The total number of offences increased from 28,995 to 29,892. The number of cases taken into Court was practically the same as last year, while cases compounded accounted for the increase. This occurred under "unauthorised felling" while there was a decrease under all the other heads. Under "injury to forests by fire" the number of offences decreased by about 15 per cent. The decrease occurred mainly in Chittoor, North Vellore and South Vellore. In Chittoor it is reported to be due to closure of certain reserves to grazing on account of heavy fires, while in North and South Vellore no explanation has been given for the decrease. The number of offences of illicit felling or removal of forest produce increased by about 6 per cent. The increase occurred chiefly in Kurnool South and West, Bellary, Cuddapah North, Cuddapah East, Chingleput, South Arcot, North Salem, South Canara and Coimbatore Central. In Nellore, Chittoor, Madura and Tinnevelly however there was a decrease. The marked increase in Kurnool South and West is ascribed to the fact that professional thieves were infesting the Nallamalais near Atmakur, and the Conservator states that a special enquiry is being held in connection with this. It is interesting to note that the increase in East Cuddapah is partly due to the presence there of the Vernacular Training School for five months in the year, the students of which detected 26 cases. The increase in Bellary and Central Coimbatore is attributed to better supervision and that in Chingleput to the preparation of separate offence reports for each individual where more than one offender was apprehended in one place and at one time. The increase in South Canara was due to the theft of sandalwood of which the rise in price has been recently very noticeable. The decrease in Chittoor and Nellore is attributed to favourable season, but that in Madura and Tinnevelly has not been explained. The slight decrease in the number of offences of illicit grazing and in the number of other offences does not call for any special remarks.

11. The percentage of cases undetected, compounded, and taken into Court, to cases reported, was 5·6, 76·04 and 18·4 against 6·7, 74·7 and 18·6. The total number of cases disposed of by Courts rose from 5,363 to 5,968 and the percentage of acquittals to cases prosecuted decreased from 10·6 to 10·3. The punishments inflicted by the Magistrates were generally adequate.

The number of cases compounded by District Forest officers or Revenue Divisional officers rose from 19,274 to 20,910 and the amount of compensation fees realized likewise rose from Rs. 1,69,461 to 1,94,940. The average fee per case was Rs. 9–5–2 against Rs. 8–12–8 in the previous year.

12. The Conservator, Northern Circle, has not reported how the rules laid down by Government in G.Os. No. 1990, Revenue, dated 13th June 1910, and No. 3958, Revenue, dated 14th December 1910, for the guidance of Forest officers in compounding offences of illicit grazing worked during the year. The rules are reported to have been observed in the other circles. The Government has recently accepted the recommendation of the Forest Committee to amend these rules by fixing a maximum of Rs. 100 for any one case irrespective of the number of animals involved.

The closure of forests to grazing as a punishment for systematic offences on a large scale was not deemed necessary in any district except in Kurnool West and North and South Coimbatore.

13. Rewards amounting to Rs. 446–8–0 were granted to informers and forest subordinates. The figure for the Central Circle has not been furnished. The Conservator, Southern Circle, points out that it will be of advantage if rewards are more frequently granted, for instance in Salem, for the detection of goat-browsing in reserves. The matter is engaging the Board's attention.

Rewards were granted to Chenchus on the Nallamalais for protecting a large area of the forest round their gudems from fire. The treatment of these hill people requires much tact and patience.

14. Separate statistics of the offences in unreserved lands has this year been furnished for all the circles.

Protection from fire.

15. The system of fire protection adopted in most districts was the same as in the previous years, viz., the clearing of exterior and interior fire lines and patrol by fire watchers. In South Kurnool, it is reported that a fire line in Sirvel range was given on contract to be cut free of cost to Government in return for which the contractor was allowed to take free the produce resulting from the operations. The work is reported to have been well done and to have reduced fires in that range. The system of burning large areas of forests in strips of varying width in order to secure protection to the remainder was discontinued both in North and East Cuddapah and it is proposed not to resort to it again. The total area over which special protection was attempted was 6,037 square miles against 5,758 square miles in the previous year. Five hundred and forty-five square miles of the area attempted to be protected were burnt, the percentage of failure falling from nearly 11 to 9·03 per cent. The cost per square mile successfully protected fell to Rs. 22–3–0 from Rs. 22–13–1 in the previous year. The Conservator, Southern Circle, remarks that the origin of most of the fires reported is doubtful and that satisfactory detection is seldom made. He therefore advocates the grant of liberal rewards for good work in detecting cases of fire. The Board agrees that useful results might thereby be attained. The measures taken to secure the co-operation of the hill tribes such as the Khonds in Ganjām, Chenchus in Kurnool and the Malayalees in the Javadis to protect the forests from fire in return for rewards and grazing concessions are reported to have been eminently successful. In addition to the areas under special protection, the ordinary staff attempted to protect 9,326 square miles against 9,315 square miles in the previous year of which 8,869 square miles were successfully protected. The Conservator, Western Circle, observes that the registration of fires in these areas continued to be untrustworthy and that several fires were not reported; he considers that improvement cannot be hoped for until the establishment is strengthened

16. The following statement compares the number and origin of the fires which occurred during the year with those of the previous year :—

—	1911-1912.		1912-1913.	
	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.
Fires originating in departmental fire conservancy operations	57	3,808	45	23,601
Fires crossing the exterior fire lines	177	215,707	166	52,494
Fires due to carelessness or accident	338	150,428	318	59,117
Fires originating from intention or malice ..	461	223,450	260	100,478
Fires due to unknown causes	660	345,251	637	428,379
Total ..	1,693	938,644	1,426	664,069

The number of fires and area burnt were both much less than in the previous year. The area burnt through carelessness in burning fire lines departmentally increased, which is unsatisfactory. It is observed that 74 per cent. of the total area burnt was in the Northern Circle, principally in *Upper Gōdāvari*, *Kurnool East and West.* In Upper Gōdāvari large areas were burnt; but it is reported that correct statistics were not furnished owing to the Nugur and Cherla Range officers not furnishing fire occurrence reports for 82,570 acres, and that the delinquents will be suitably dealt with. The fires in the two Kurnool divisions were due to the fact that the whole of the Nandyal range was burnt over owing to the unsettled state of the fire line boundary between the two divisions. Arrangements have since been made to settle this question in a practical way. As in the previous year, the origin of a large proportion of fires could not be ascertained. The punishment of closure of reserves to grazing for incendiarism was resorted to in Kurnool, Anantapur, East Cuddapah, Tinnevelly, Coimbatore North and Central, and Kollegal.

Protection from cattle.

17. Three thousand one hundred and sixty-three square miles or 16 per cent. of the total area of reserved forests and reserved lands (19,466 square miles) were closed to all animals throughout the year and 280 square miles for part of the year, against 2,778 square miles and 266 square miles respectively in the previous year. Six hundred and eighty-three square miles of reserved forests and lands were open to goats against 799 square miles open last year, and no goats were admitted in either reserved forests or reserved lands in Vizagapatam, Gōdāvari Upper and Lower, the three divisions of Kurnool, South Vellore, South Arcot, South Salem, Trichinopoly, Tinnevelly or any of the districts of the Western Circle. Goats alone were excluded over an area of 14,752 square miles and goats and sheep over 489 square miles against 16,256 square miles and 294 square miles respectively last year In South Coimbatore alone, 179 square miles were closed to both goats and sheep in accordance with the provisions of the grazing scheme for Udamalpet taluk. It is reported that, as a result of a conference held with the local ryots regarding the working of the Udamalpet grazing scheme, it was found that they had no real grievance and that the restrictions imposed by the scheme are beneficial to them. The Government has recently accepted the recommendation of the Forest Committee that goats should be excluded from all reserved forests. In Government Order No. 1600, Revenue, dated 30th May 1913, Government ordered the closure to grazing of the whole of the southern slopes of the Jarugumalai Hills in the Salem district in order to avoid the contamination of the water-supply in the neighbourhood.

The number of cattle impounded fell from 200,161 to 196,108, but the total number of animals admitted to grazing on payment rose from 3,552,777 to 3,890,747. The number of buffaloes, bullocks and cows and sheep licensed increased by 18,851, 135,434 and 188,971, respectively, but the number of goats fell by 5,066. The number of buffaloes and cows admitted to grazing free in Upper Gōdāvari is now shown as 701 and 16,638 against 4,074 and 48,288 in the previous year and the decrease has not been explained. As remarked in the previous year's review, no progress

could be made in the preparation or sanction of schemes for the regulation of grazing, pending the orders of Government on the report of the Forest Committee. These orders have now been received and this subject will now be taken up.

Protection against injuries from natural causes.

18. The borer *Arbela tetraonis* continued its depredation in the Agastinowgam plantation in Ganjām though the spread of root fungus *Trichosporum vesiculosum* has practically stopped there. The young teak plantations in South Malabar were attacked by *Hybloea* and by *Pyrausta*. It is reported that as an experiment a light ground fire was burnt through some of the areas affected and that thousands of caterpillars were thus destroyed. The leaf pest continued to defoliate teak in Kurnool East and West. Spike continues to spread in sandalwood areas in Kollegal in spite of the removal of the spiked trees, and invaded two new sandalwood areas in North Coimbatore necessitating the marking of 8,000 dead spiked trees in Hassanur coupes II and III. Damage was caused to coppice reproduction of *Pterocarpus marsupium* in Tinnevelly by sambhur. Lantana was eradicated on a small scale in Tinnevelly. The same pest gave special trouble in the Tekkadi leased forests in South Coimbatore, in Ramandrug in Bellary and in Horsleykonda in Chittoor. Another pest, prickly-pear, was specially troublesome in Madura and North Salem. The parasite *Loranthus longiflorus* attacked the *Albizzias* and *Melias* in Perambalūr and Udaiyārpālaiyam ranges in Trichinopoly district. The Board of Forestry at a meeting held in Dehra Dun in March 1913 discussed the question of the removal of lantana and prickly-pear and came to the conclusion that, in order to reduce the cost of eradicating these pests, steps should be taken by the Forest Research Institute to ascertain if products of economic value, such as pulp or acetine, are obtainable from them. This resolution has already been communicated to Conservators.

(4) SYLVICULTURE.

Natural reproduction.

19. Reproduction from seedlings was satisfactory where conditions were favourable. It was poor in South Kurnool, Trichinopoly (except in the inaccessible parts of the higher slopes of the Pachamalais), the Nilgiris, and Central Coimbatore (except in the coupes recently felled and closed to grazing and the Attapadi valley). Reproduction of red sanders from seed and coppice was excellent in both divisions of Cuddapah. Sandalwood is spreading well in Bellary and South Salem, but its regeneration in North Salem was poor owing to the failure of south-west monsoon; it seeded well in Chittoor, but the seedlings either died back or were destroyed by cattle. Root suckers system of reproduction of sandal has proved a failure in South Vellore and is now supplemented by sowing seed in the hollow left by the uprooted tree and the results are being watched. From districts in the Southern Circle where sandal exists it is reported that the species is steadily spreading through the agency of birds. Teak seeded profusely in North Vellore; its reproduction by coppice was fair in Muliar fuel coupe of South Canara, but absent elsewhere in the district; in North Malabar teak reproduction by root suckers improved, but seedlings were scarce. Reproduction by coppice was generally good in areas protected from fire and grazing.

Artificial reproduction.

20. One thousand two hundred and forty-six acres were added and 1,805 acres excluded from the area of regular plantations, leaving a net decrease of 559 acres against an increase of 2,413 acres in the previous year. The additions were chiefly to the casuarina plantations in Gōdāvari Lower and Guntūr, the teak plantations in West Kurnool and South Malabar, the Moka plantations in Bellary and the pine plantations in the Gundar valley. There were no additions to the taungya plantations during the year. Cultural operations were carried on over 21,037 acres at a cost of Rs. 26,708 against 23,203 acres at a cost of Rs. 35,940 in the previous year, the decrease occurring mainly in the Southern and Western Circles. The operations consisted as usual of ploughing, sowing, dibbling in seeds and putting out seedlings and cuttings of various species and except in special circumstances

gave little encouragement. In his note on forest revenue and expenditure in Madras, Mr. Beadon Bryant has suggested that more economy should be effected under cultural operations, that attempts to re-stock hard and infertile soil artificially on any large scale should be abandoned and that such degraded areas as it is advisable to retain as reserved forests should be rigidly protected. This represents exactly the policy which the Board itself has been endeavouring to impress on Conservators for some years past.

Operations for the improvement of growing stock.

21. The operations undertaken during the year for the improvement of growing stock consisted, as in previous years, of improvement fellings, thinnings, fencing, creeper cutting, removal of inferior species, dead and dying trees, parasities and noxious growth and weeding. In Bellary and Chittoor some bunding of streams was undertaken but the majority of the bunds in the former district have been washed away as the operations were not conducted properly.

Experiments.

22. Successful experimental cultivation was carried on in the following districts:—

Sandal in Vizagapatam, red sanders in North and South Vellore, South Arcot, Ganjām, Kurnool West and in the Conservator's bungalow compound at Waltair, *Swietenia mahogani* in North Vellore, South Vellore, Trichinopoly, Madura, East Cuddapah, Nellore, South Canara, North and South Malabar, Nilgiris and Central Coimbatore, *Dalbergia sissoo* in Bellary and South Arcot, *Cedrela odorata* in South Malabar and Coimbatore, *Acacia auriculiformis* in North Vellore, Salem, North Cuddapah and Nellore, and *Landolphia florida* in South Malabar. Experiments with *sesbania aculeata*, which is required for leaf manure, have been stopped in the Central Circle, as suggested by the Board, and this work will in future be left to the Agricultural Department.

(5) EXPLOITATION.

(*a*) *System of management.*

Major produce.

23. The various methods of the exploitation of major produce were, as in previous years, clear or regeneration fellings, thinnings, selection fellings, improvement fellings, and coppice fellings. Clear or regeneration fellings were carried on mostly in Bellary, Lower Gōdāvari, Kistna and Kurnool West. Thinnings were carried out in the teak plantations in South Malabar. Fuel in some of the coupes in Lower Gōdāvari and Kistna and bamboos in Kistna and Kurnool West was removed under the same system. Selection fellings were carried out as usual in timber coupes or where it was found necessary to eliminate dead, diseased and suppressed trees. Bamboos were also worked by selection felling in North Vellore, South Arcot and South Salem. Improvement and coppice fellings were undertaken to a large extent in most districts. Unregulated fellings under the permit system were made in some unreserves; in reserves this antiquated system was chiefly confined to the extraction of bamboos in North Malabar, South Malabar, Kollegal, the Nilgiris and South Coimbatore, of palmyra trees in Kurnool East and West, of small timber and fuel in the Rampa forests of Lower Gōdāvari and in the Nilgiris, of cinnamon leaves and some firewood in South Canara.

Minor produce and fodder grass.

24. Minor produce was generally leased out. The manufacture of catechu in South Canara, and collection of miscellaneous produce in parts of the Nilgiris, South Coimbatore, Kollegal and North Coimbatore were carried out by departmental agency. Manure leaves in North and South Vellore and South Arcot were removed on the permit system and permits were also issued in several districts for the removal of stones, gravel, etc. In Nellore, palmyra trees and leaves, etc., were granted for the construction of houses to the criminal tribes at Kalichedu and Kavali settlements. In Guntūr, South Kurnool, Madura, South Malabar and Coimbatore permits were

issued for fodder grass ; it was leased out in Lower Gōdāvari, Kistna, North Cuddapah, Tinnevelly and parts of Guntūr and Central Coimbatore. Ryots were allowed to cut and remove grass free from reserves in Vizagapatam, Gōdāvari Lower, Kistna and three Kurnools, Bellary, Anantapur, North and East Cuddapah, Chittoor, North Vellore and parts of South Canara and the Nilgiris. There was no free removal of grass from any of the reserves in Chingleput, Nellore, South Arcot, North and South Salem, Trichinopoly, Malabar and Coimbatore. In Bellary, Mr. Hewes cut and removed 100 tons of grass against 475 tons in the previous year, and the Military Department took 839 tons against 971 tons in the previous year.

Hay-making.

25. Experimental operations in hay-making were undertaken in Guntūr and East Cuddapah and a detailed report on the subject has been promised. Hay was collected in small quantities in South Canara, South Kurnool, North and South Salem and Trichinopoly. In South Canara and South Kurnool the hay was used for feeding Government bullocks ; elsewhere it was sold. In Central Coimbatore the preparation of hay was left to private agency, and in North Vellore to the Military Department on payment of a royalty of Rs. 2 per ton on hay removed.

Grazing.

26. The revenue from grazing and fodder grass, Rs. 6,91,509, was greater than in the previous year by Rs. 59,494. Taking the districts individually, the revenue under this head increased noticeably in Gōdāvari Lower, Kistna, Kurnool East, Bellary, Nellore, Vellore, North and South, North Salem and Trichinopoly. In Kurnool East and Lower Gōdāvari the increase was due to large number of foreign cattle taken to the Nallamalais and Rampa. The increase in Kistna has not been explained ; in Nellore it was due to larger areas being open to grazing, in Bellary to the favourable season while in the remaining districts, better supervision is the reason put forward.

(*b*) *Agency of exploitation.*

27. The subjoined table compares the outturn through all agencies of timber, fuel, bamboos and minor produce with that of the preceding year :—

Agency of exploitation.		Timber including sandalwood in cubic feet.		Fuel in cubic feet.		Bamboos in number.		Minor produce (including grass and grazing) gross value in rupees.	
		1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.
		C. FT.	C. FT.	C. FT.	C. FT.	NO.	NO.	RS.	RS.
By Government agency.	Northern Circle.	370,195	323,766	4,007,005	1,460,144	6,135,885	4,046,737	14,922	10,628
	Central Circle.	87,769	67,011	3,518,918	1,417,886	213,926	88,338	11,934	18,036
	Southern Circle.	43,296	32,535	2,856,449	354,048	199,304	4,232	1,066	433
	Western Circle.	281,316	286,927	2,175,521	2,071,673	122,914	206,909	24,496	25,647
	Total ..	782,576	710,239	12,557,893	5,303,751	6,672,029	4,346,266	52,418	54,744
By purchasers.	Northern Circle.	637,198	(*a*)1,262,711	1,112,102	2,991,914	13,927,560	10,668,814	2,65,593	2,43,782
	Central Circle.	1,054,247	1,396,145	1,549,646	4,208,548	1,530,595	1,683,367	6,68,445	9,41,935
	Southern Circle.	1,051,227	983,229	7,463,960	6,259,365	20,600,461	12,660,892	4,25,424	5,07,871
	Western Circle.	259,715	300,788	1,284,676	2,068,520	4,317,539	4,818,838	1,29,111	86,225
	Total ..	3,002,387	3,942,873	11,410,384	15,528,347	40,376,155	29,831,911	14,88,573	17,79,763
By right holders.	Northern Circle.	807	807	154,806	154,806	12,293	12,293	24,137	23,582
	Central Circle.	..	..	..	..	..	..	110	151
	Southern Circle.	..	..	20	20	..	..	2,431	820
	Western Circle.	51,747	33,386	33	28	1,371	1,392	739	721
	Total ..	52,554	34,193	154,859	154,854	13,664	13,685	27,417	25,274
By free grantees.	Northern Circle.	40,397	22,643	560	..	140,825	47,670	102	107
	Central Circle.	57,715	58,117	41,568	20	24,760	24,950	372	1,836
	Southern Circle.	50,672	32,276	1,852	104,301	24,970	26,441	531	10,316
	Western Circle.	11,053	6,062	636	975	13,056	9,045	98	417
	Total ..	159,837	119,098	44,616	105,296	203,611	108,106	1,103	12,676
Grand Total, Presidency ..		3,997,354	4,806,403	24,167,752	21,092,248	47,265,459	34,299,968	15,69,511	18,72,457

(*a*) Corrected in the Board's office.

28. The quantity of timber extracted and the value of minor produce collected increased while the quantity of fuel and the number of bamboos cut decreased. Timber extracted by Government agency decreased by about 72,000 cubic feet and that by purchasers increased by about nine lakhs and fifty thousand cubic feet. The decrease in the outturn through departmental agency occurred in all the circles except the Western. In the Northern Circle, the fall is ascribed to the substitution of contract for departmental agency, in the Central to restricted fellings in Bellary, lack of demand in Guntūr, and to the temporary cessation of felling of red sanders in Chittoor, and in the Southern to stoppage of timber operations in North and South Salem divisions pending preparation of working plans. In the Western Circle, the increase in departmental working of timber was chiefly in North Malabar due to the felling of Begur coupe and in the Nilgiris to the large quantity of timber felled in the Mudumalai working circle. The larger employment of contractors in place of departmental extraction, larger removal from darkhast lands in all the circles except the Northern, and the inclusion in the accounts of the outturn of unreserved land in Kollegal omitted in the previous year, accounted for the increased extraction of timber by purchasers. The quantity of fuel extracted by departmental agency decreased in all the circles and that cut and collected by purchasers increased in all the circles except the Southern. The transfer of the exploitation of fuel from departmental to private agency accounts for the increase. In the Southern Circle, the decrease was due chiefly to the fact that the contractors failed to complete fellings in their coupes. The Board is of opinion that on the whole a great advance has been made in the extension of the system of contract fellings and extraction of fuel.

29. The number of bamboos extracted by departmental agency decreased by about 2,325,763 the decrease being spread over all the circles except the Western. The number removed by purchasers likewise decreased from 40,376,155 to 29,831,911, and the Northern and Southern Circles contributed to this decrease. The decrease in the former circle has not been explained, while in the latter it is said to be due to short work by contractors and to suspensions of contracts for irregular work in South Vellore and North Salem.

30. The value of minor produce extracted departmentally increased in the Central and Western Circles while it decreased in the other two circles. The increase in the Central Circle was due chiefly to departmental hay operations in Guntūr and East Cuddapah. The increase in the Western Circle was small and calls for no explanation. The increase in the value of minor produce collected by purchasers was due in the Central Circle to keen competition among tangedu bark contractors and in the Southern to better sales. The decrease in the Western Circle occurred chiefly in Central Coimbatore owing to hay-making operations being left to private agency and partly in North Coimbatore owing to poor collection of gallnuts and other miscellaneous produce, while that in the Northern has not been explained.

31. The estimated value of forest produce removed by right holders was Rs. 41,517 against Rs. 50,766 and that granted free Rs. 28,562 against Rs. 20,057.

(6) Financial Results.

32. The following statement exhibits the financial results of the year as compared with those of the previous year and with the average of the preceding five years:—

Years.	Revenue.	Expenditure.			Surplus.
		A. Conservancy and Works including Refunds.	B. Establishment.	Total.	
	Rs.	Rs.	Rs.	Rs.	Rs.
1912-1913	41,18,771	15,55,534	14,86,623	30,42,157	10,76,614
1911-1912	42,37,795	19,72,807	14,73,634	34,46,441	7,91,354
Average for the five years preceding 1911-12	38,30,239	18,25,778	11,73,990	29,99,768	8,30,472

The revenue and expenditure of the year show a decrease of Rs. 1,19,024 and Rs. 4,04,284 respectively as compared with the figures for the previous year. The expenditure under A. Conservancy and Works decreased by Rs. 4,17,273 while under Establishment it increased by Rs. 12,989. The net result must, in the Board's opinion, be considered quite satisfactory. It is sufficiently plain that the change from departmental to contract working has been beneficial to the department financially as well as in other ways.

33. The net surplus exceeded that of the previous year by Rs. 2·85 lakhs. Taking the circles individually, the financial results show a deficit in the Northern Circle and a surplus in other circles. The Southern Circle stands easily first with a surplus of $7\frac{1}{2}$ lakhs. The Central Circle comes next with a surplus of $2\frac{3}{4}$ lakhs, while the Western Circle has converted the deficit of past years into a surplus of slightly over a lakh. As regards the deficit in the Northern Circle, the Conservator (Mr. A. W. Lushington) contends that the figures do not show the true working of the year, as expenditure under A. Conservancy is largely capital expenditure. Generally speaking it is of course obvious that a surplus balance can be no true criterion of successful forest management unless capital expenditure is properly separated from ordinary expenditure. In the present degraded condition of some of the forests of the Northern Circle a substantial surplus on the year's working could not be obtained with any due regard to the future.

It is observed that the deficit in the Northern Circle has fallen from Rs. 1,63,168 to Rs. 61,789 and the value of stock in hand at sale depots at the close of the year under review is estimated at Rs. 30,542.

34. The fall in the gross revenue of the year occurred under the following heads :—

	Rs.
(1) Fuel (both by Government Agency and purchasers)	3,30,600
(2) Bamboos (both by Government Agency and purchasers) ...	38,761
(3) Grass and other minor produce (both by Government Agency and purchasers)	55,135

The large drop indicated by the above figures is counterbalanced by an increase under the following items :—

	Rs.
(1) Sandalwood	1,28,827
(2) Grazing and fodder grass	59,494
(3) Timber	51,796
(4) Miscellaneous (including confiscated drift and waif wood) ...	65,355

The decrease was due to the following causes :—

(1) *Fuel.*

Introduction of the contract system of working generally in all the circles.

(2) *Bamboos.*

Leasing of bamboo coupes to contractors in the Northern Circle chiefly, payment of full lease amounts due for 1912-1913 in the previous year in Bellary and North Cuddapah and to non-sale of two coupes in North Coimbatore.

(3) *Grass and other minor produce.*

The fall is accounted for by a poor crop of tamarind and fall in the tree owners' fees in the Northern Circle; collection of only three tangedu bark kists as against five in the previous year in Bellary, the discontinuance of the sale of Rela (*Cassia fistula*) bark in Anantapur, stopping of the minor forest produce leases for Tuki (*Diospyros Ebenum*) and manure leaves in *East Cuddapah*; exemption of seigniorage on road metal collected by the contractors of the Local Fund Department, short removal of manure leaves owing to enhancement of seigniorage in *South Canara* and South Arcot and lower prices realized in *North Coimbatore* for avaram bark and tamarind.

The increase in revenue counterbalancing the large decrease under the above items is due to the causes shown below:—

(1) *Sandalwood.*

Extraction of a larger quantity of sandalwood and very good prices realized in local sales in the Southern Circle; sale of previous year's stock in the *Nilgiris* and *North Coimbatore* and better prices realized in the Western Circle.

(3) *Timber.*

Larger removals from unreserves and Rampa in the Northern Circle; sale of a larger number of plantation teak logs and poles in *South Malabar* and better prices obtained for more extensive sales of timber in *South Coimbatore*; and larger amount realized by sale of timber trees in Cumbum, Madura district.

(4) *Miscellaneous.*

Sale of 19 elephants and collection of arrear rents and value of additional lands leased out on the Anamalais in the Western Circle.

35. The expenditure under "A-Conservancy and Works" decreased by Rs. 2,99,384 under "I (*b*). Firewood" due to the adoption of the contract system of working fuel coupes, by Rs. 13,116 under "I (*a*). Timber," by Rs. 17,187 under "I (*c*). Bamboos," by Rs. 10,508 under "I (*d*). Sandalwood," by Rs. 18,983 under "VI (*b*) Feed and keep of cattle," by Rs. 15,411 under "VI (*c*) Stores, tools and plant," by Rs. 12,215 under "VII (*a*) Roads and bridges," by Rs. 10,821 under "VIII (*a*) Demarcation," by Rs. 19,040 under "VIII (*b*) Cost of forest settlement" and by Rs. 36,864 under "VIII (*e*) Sowing and planting." The increased expenditure under "B. Establishment" was due to the debiting of pay and travelling allowance of the Forest Settlement officer, Vizianagram estate, to the forest accounts, to the time scale of pay of Imperial and Provincial officers, to increased establishment sanctioned for the District Forest Officer, Chittoor, to charges incurred for the Vernacular Training School (a fourth one having been opened during the year), to increased rate of grain compensation allowance sanctioned for certain districts, to advertisement charges for sales of timber and elephants and to the existence of the Direction office and North Vellore District Forest office during the whole year.

36. The following statement shows the financial results of the year after deducting capital expenditure not yielding an immediate outturn:—

	Rs.
Gross revenue	41,18,771
Value of produce removed by right-holders and free grantees ...	70,079
Total ...	41,88,850
Gross expenditure	30,42,157

Deduct expenditure not yielding an immediate outturn—

	Rs.
(1) Communications and buildings	3,61,307
(2) Cultural operations	1,70,327
(3) Working plans	— 183
(4) Settlement	12,804
(5) Surveys	30,944
(6) Demarcation	33,372
Total ...	6,03,571
Balance of direct revenue producing expenditure	24,33,586
Surplus of revenue over expenditure directly chargeable to revenue	17,55,264

ADMINISTRATION.

37. The Hon'ble Mr. W. O. Horne, C.S.I., was Forest Commissioner throughout the year. He toured with the Forest Committee in the districts of Nellore, Guntūr, Madura, Anantapur and Chingleput. He also visited the districts of Chittoor, the Nilgiris, Kurnool, Salem, South Canara, Malabar and Bellary. In South Canara he conferred with the Collector and the District Forest Officer regarding the departmental supply of fuel to Mangalore. He presided over the meeting of the Board of visitors of the Madras Forest College at Coimbatore on the 27th and 28th June 1913 to discuss various questions relating to the work and discipline of the College. The proceedings of the meeting are now before Government.

38. Mr. A. W. Lushington was in charge of the Northern Circle throughout the year, Mr. P. M. Lushington was in charge of the Central Circle up to 24th February 1913 and Mr. H. B. Bryant for the rest of the year. Mr. J. S. Battie and Mr. F. A. Lodge held charge of the Southern and Western Circles respectively throughout the year. The Conservators visited during the year all districts except Anantapur, Chingleput, South Canara, North Malabar and Central Coimbatore, and inspected all the District Forest offices except Anantapur. All District Forest officers except those of Kurnool East, Nellore, Tinnevelly and the Nilgiris spent sufficient time in touring; the short touring has been satisfactorily explained except in the case of the District Forest Officer, Tinnevelly. All the range offices except one in Kurnool West, one in East Cuddapah, a newly formed range, one in South Vellore, three in Tinnevelly (which were however inspected after the close of the year) and one in South Coimbatore were inspected by District Forest Officers. The accounts of the Forest offices except those of Kistna, Bellary, Chingleput and the Nilgiris were scrutinized by auditors from the Accountant-General's office and the results were reported to be generally satisfactory. The Assistant Accountant-General inspected the office of the District Forest Officer, the Nilgiris, but the accounts of that district were not audited in detail either in 1911–12 or in 1912–13.

39. The Forest year marked its commencement with the opening of the Forest College at Coimbatore, a fact which was noticed in last year's report. Two classes of students are now under training, the second batch having joined in July 1913.

The Forest Committee appointed in January 1912 completed its investigations and submitted its report at the beginning of January 1913. The Committee after visiting several typical districts where forests of many kinds were inspected, and after recording evidence from a large number of witnesses of all classes, has formulated a definite policy for future management of the forest property in this Presidency. Government have recently passed orders on the report and have been pleased to accept the bulk of the proposals. The gist of the Committee's scheme is to invoke the agency of the village panchayat for the control of a considerable portion of the present reserved area. Wherever reserves are intended mainly for grazing, or while being useful for grazing contain certain tree growth which is required mainly for rural needs, it is proposed that panchayats should be encouraged to undertake the duty of protection within the boundaries of the village concerned. The major reserves which must be preserved for climatic purposes and for the protection of water sources, as well as reserves which are valuable as producers of timber or fuel for the town market, will naturally remain in charge of the scientific forest officer. In the very large number of reserves, however, in which grazing and rural supply of fuel and small timber may be regarded as the dominant objects, the new scheme proposes to enlist the assistance of the villager himself for purposes of protection, and it is hoped by these means to remove the main cause of friction between the Forest department and the public. The interference of the low-paid subordinate in the daily life of the villager will thus be minimized. Moreover an attempt will be made through the medium of the panchayat to regulate the number and class of cattle admitted to the reserves for grazing.

The Committee also dealt with the supply of fuel and of leaf manure. In regard to fuel it has for some time past been the declared policy of Government to foster the contract system under which felling and removal are done by the purchaser. The earlier systems were known as the permit and depot systems respectively. The former allowed a permit-holder to enter the forest and cut what he chose, the only check and that a nominal one, being on the amount of produce removed. The depot system made

Government the chief fuel merchant in the market and endeavoured to ensure constant supply of cheap fuel at an unvarying price. The defects of both these systems are obvious. The former was wasteful and ruinous to the forests, and the latter while throwing on the forest officials a great burden of work *outside the forest* resulted in serious financial loss, the fuel being sometimes sold at less than cost price. The present policy is to leave the trade to follow its own natural lines.

With regard to leaf manure the policy of recent years has been to stimulate the use of green manure crops and to discourage the practice of obtaining leaves from the forest. The Committee endorses this policy. Actual experiment has proved that a fully stocked acre of fuel forest, stripped to the last leaf, yields little over one cart-load of leaf manure, and as a single acre of wet land requires at least two cart-loads, it is obvious that the supply from forest sources only must be inadequate. To this must be added the consideration that forests when stripped of their leaves rapidly deteriorate. The results of growing green manure on the land have been most encouraging and the practice is spreading rapidly especially in the area served by Periyar water.

As already noted the business of supply of seed for green manure crops and of stimulating experiments devolves on the Agricultural Department.

The question of fuel plantations was also considered by the committee who recommended that they should be got rid of altogether as a Government concern. This policy has already been partially adopted and steps are being taken to dispose of many of the casuarina reserves and plantations on the coast. The industry is now fully established and may safely be left to private individuals.

The Inspector-General of Forests visited the Presidency during the year and left on record a valuable note containing criticisms and suggestions. Action has already been taken on some of his suggestions and others are under consideration.

Effect has not yet been given to the division of the Gōdāvari district into three charges (already sanctioned by Government) owing to want of officers ; the Government have also lately sanctioned the division of South Canara into two forest charges ; this also cannot be given effect to for the present.

The result of the year's work was, as shown in paragraph 32, a net surplus of $10\frac{3}{4}$ lakhs or nearly three lakhs more than the figure of the previous year. This result was to a considerable extent due to the substitution of private for departmental agency in the distribution and felling of fuel. The total gross revenue was slightly less than in the previous year and the net result demonstrates the advantage of leaving the supply of the market to private agency. It must, however, be remembered that the main object of forest conservancy is not to amass revenue but to conserve for the public, both for present and future generations, the valuable property enshrined in the forests. For this purpose money has to be freely spent on establishments, on communications, and buildings and the present establishments are in many cases hopelessly inadequate for the duties required of them. A scheme for strengthening the subordinate staff has now for a considerable time been before Government.

40. The Board is glad to place on record its appreciation of the good work done by Conservators and District Forest-officers. In the Honours list of New Year's day, 1913, appeared the name of Mr. Lodge, Conservator of Forests, Western Circle, with a Companionship of the Most Eminent Order of the Indian Empire. While congratulating Mr. Lodge on this well deserved honour the Board would also congratulate the Forest Department on this public recognition of one of their principal officers. The Board regrets to record the death during the year of Mr. B. H. Barlow-Poole, Deputy Conservator and District Forest-officer, South Kurnool, and of Mr. N. M. Rego, Extra Assistant Conservator and District Forest-officer, Upper Gōdāvari. By their deaths the Government have lost two most zealous officers. The work of Mr. Daly, Extra Assistant Conservator and District Forest-officer, North Cuddapah, has recently been the subject of special enquiry and the Board is submitting his case for the consideration of Government.

The Madras Forest College, Coimbatore.

41. The Madras Forest College, Coimbatore, opened on 1st July 1912. Mr. F. C. L. Cowley-Brown was Principal of the College throughout the year except during a short period from 11th March to 17th April 1913. The first batch of

students numbering 31 entered the College. During the year five were removed for illness, incapacity, etc., and one died, leaving 25 on the roll at the end of the year. All these 25 students under training are already in Government service. The College was out in camp from 10th September to 20th December, from 17th January till 8th March and again from 6th May to 21st June. Towards the end of the second of these tours, the whole school suffered severely from fever and on return to head-quarters the Principal found it advisable to close the college and to advance the date of the vacation by three weeks. One of the students unfortunately died and the Principal himself had to go to a hospital in Bangalore for treatment. The students though not of a high intellectual standard, are reported to be striving to profit by the course and there can be no doubt that they will succeed. They are, for the most part, said to be a well set up body of young men.

The college and its hostels are at present temporarily located in the old hospital buildings and in private houses. The members of the staff spared no pains in adapting the buildings for the purposes required. The foundation stone of the new college was laid by His Excellency the Governor on the 9th April 1913 and the buildings are rapidly rising.

General.

42. The timber and sandalwood transit rules worked smoothly; in South Canara in the interest of Government some modifications to the rules have been proposed. The privileges allowed by the rules under section 26 of the Forest Act were generally availed of by the people and there were no complaints nor abuses except in Vizagapatam, Gōdāvari Lower, and to some extent in South Arcot.

43. Every encouragement is afforded to the mining industry. The mica industry in Nellore is steadily improving and the market continues favourable. The results of the year under report show an increase both in the output and in the royalty realised.

44. The number of elephants in charge of the Forest Department at the close of the year was 124 against 127 in the previous year. The decision to sell captures of young elephants was referred to in last year's report. Eighteen elephants have recently been sold at fair prices. The total number captured during the year was 20.

45. A memorandum of minor discrepancies found in the Circle reports is appended.

(True Extract.)

W. G. McFarland,
Secretary.

To the Secretary to Government, Revenue Department.

APPENDIX.

Northern Circle.

(i) *Appendix B, page II of the Appendices*—

(*a*) The figure 497 entered in column 3 against Lower Gōdāvari is a mistake for 479.

(*b*) The figure 4,613 in column 5 against total should be altered into 4,614.

(ii) *Form No. 70, pages XVI to XIX of the Appendices*—

(*a*) The figure 837 in column 12 against "Total—Ganjam" in page xvii is a clerical mistake for 870.

(*b*) The figure 3,297 in column 13 in page xix against "Total—Northern Circle" is a mistake for 30,297.

(iii) *Form No. 71, page XXII of the Appendices*—

The figure 413 in column 2 against "Total—B" is a mistake for 433.

(iv) *Form No. 73, page XXVIII of the Appendices*—

The area of reserved lands in Upper Gōdāvari, 99 square miles, shown in column 8, has not been exhibited in any of the columns 2 to 7.

(v) *Form No. 74, pages XXX to XXXII of the Appendices—*

(*a*) The number 31,386 of cows and bullocks entered in column 13 against the first total is a mistake in totalling, for 37,386. The figure in column 13 against "Grand total" should also be altered into 69,688.

(*b*) In the abstract of animals licensed to graze on payment, printed at page xxxii of the Appendices, the figures 366,743 and 644,555 are mistakes for 372,743 and 650,555.

(vi) *Form No. 76, pages XXXIV to XXXIX of the Appendices—*

(*a*) The figure 207,474 in column 12 against "Total—Vizagapatam" at page xxxv is a mistake for 207,494.

(*b*) The figure 3,661 in column 3 against "Total—Kurnool West" at page xxxvi is a mistake for 6,481.

(*c*) The figure 7,826,657 in column 11 against "Total—Kurnool South" is a mistake for 782,657.

(*d*) The figures 12,25,178, 15,72,394, 61,79,258 in the second grand total column at pages xxxviii and xxxix should be altered into 12,62,711, 16,09,927 and 62,16,791.

(vii) *Form No. 77, page XL of the Appendices—*

The figure 84,418 in column 8 against Miscellaneous is a mistake for 84,318.

(viii) *Summary of receipts and expenditure—page XLVI of the Appendices—*

The total 447,863 under "A. Conservancy and Works including refunds" in column 3 is a mistake for 447,803.

CENTRAL CIRCLE.

(i) *Appendix to Annual Form No. 71, printed at page XXVI of the Appendices—*

(*a*) All the three cases of "injury to forests by fire" shown in column 3 against "B" in Guntūr in the statement at page lii of the Appendices to the report for 1911–1912, have been accounted for in the Appendix printed at lxiii of the Appendices to the report of that year. Two cases in Guntūr are now accounted for as pending cases of the previous year in the above appendix. This is not understood.

(*b*) The one case of "injury to forests by fire" shown in column 3 against "B" in Guntūr in the statement at page xxiv of the Appendices has not been accounted for in the Appendix at page xxvi.

(ii) *Form No. 78, page XXXIX of the Appendices—*

The opening balance in column 2 against "Fuel" in the Circle total does not agree with the closing balance entered in column 6 against "Total—Central Circle" in the statement at page C-1 of the Appendix to the Forest Administration Report for 1911–12. The discrepancy has not been explained.

SOUTHERN CIRCLE.

(i) As per appendix A at page i of the Appendices, the area of reserved forests in North Arcot district is 796,024. In Form No. 65, at page vi of the Appendices the area of North and South Vellore divisions comprised in North Arcot district is entered as 319,170 and 476,847 acres respectively which work up to 796,017 acres. The discrepancy has not been explained.

(ii) As per Appendix A at page i of the Appendices the area of reserved lands in the same district is 74 acres. In column 12 of Form No. 65 printed at page vi, it is entered as 80 acres. The discrepancy has not been explained.

(iii) The number of animals allowed to graze free "during pleasure of Government or otherwise than under Settlement," shown in columns 23 to 25 of Form No. 74 at page xxxiii of the Appendix has been wrongly included in the "Abstract of animals licensed to graze on payment" at page xxxiv. The figures in the abstract statement 18,953, 653,044; 594,270 and 13,12,568 should accordingly be altered into 18,514; 651,457; 594,236 and 1,310,508.

Order—No. 155, Revenue, dated 16th January 1914.

Recorded.

Forest No. 8.

2. During the year under review two reports of great importance to Forest administration were dealt with.

The first was that of the committee appointed in G.O. No. 1677, Revenue, dated 5th June 1912, to deal with the more pressing problems of the administration so far as they affected the relations between the department and the agricultural population. Orders on the recommendations of the committee were passed in G.O. No. 3020, Revenue, dated 13th October 1913. The Government hope that the result

of those orders will be the creation of more cordial relations between the officers of the department and the ryots, the establishment of more effective departmental control over the more important forests, and at the same time the promotion of the interests for which the smaller reserves were constituted.

The second report was the valuable note of the Inspector-General of Forests, Mr. Beadon Bryant, on forest revenue and expenditure in Madras. This dealt chiefly with matters of departmental importance. His main conclusions were that a low proportion of expenditure to revenue should not be aimed at, that economies should be effected under building, sowing and planting, that the extension of plantations should be discouraged, that the policy of substituting contract working for departmental agency should be persisted in and that the staff should be reorganized. These subjects are being dealt with separately.

3. The principal event during the year was the opening of the Forest College at Coimbatore. The students are accommodated in the old hospital and private houses, pending completion of the new buildings.

4. In reviewing the report for the previous year the Government urged the vigorous extension of exploitation by private agency particularly in the Western and Northern Circles. It is observed that in the year under report there was in these circles a considerable replacement of departmental by private agency in dealing with fuel.

5. Better progress than in the previous year was made in reservation, the area constituted into reserved forest having risen from 7 to 48 square miles. Nevertheless the area remaining to be constituted into reserved forests rose to 656 square miles. Of this area, however, more than a third has since been notified.

6. Mr. Beadon Bryant observed in his recent note that the position of the department in regard to working-plans is not satisfactory. Working-plans were prepared for a much larger area in 1912–13 than in 1911–12, but the Government are aware that without additional establishment little can be done in this direction and the question of obtaining such establishment is now engaging attention.

7. The large decrease in the area reported as having been burnt is satisfactory.

8. The marked increase in the net surplus of receipts over expenditure was due to a fall under the latter head which, the Board observes, is to a considerable extent consequent on the substitution of private for departmental agency in the felling and distribution of fuel. This is a very satisfactory form of economy. It is observed that the Western Circle has converted its customary deficit into a considerable surplus and that the deficit of the Northern Circle has been largely reduced as compared with the previous year.

9. The Government note with pleasure the Board's appreciation of the good work done by the officers of the department, and they desire to place on record their appreciation of the administration of the department by the Hon'ble Mr. W. O. Horne.

10. In conclusion the Government request that the Board will consider whether the great mass of statistics attached to the report could not be reduced by omitting some of the returns attached thereto and by simplifying others.

(True Extract.)

A. BUTTERWORTH,
Ag. Secretary to Government.

To the Board of Revenue (Land Revenue--Forests).
,, Accountant-General.
Copy to the Public (X) Department.
,, the Hon'ble Mr. W. O. Horne, C.S.I., I.C.S.
,, Government of India, Department of Revenue and Agriculture (with C.L.)

Editors' Table.

Presented by Madras Govt

ANNUAL ADMINISTRATION REPORT

OF THE

FOREST DEPARTMENT

OF THE

MADRAS PRESIDENCY

FOR THE

TWELVE MONTHS ENDING 30TH JUNE 1914.

1913-1914.

MADRAS:
PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRESS.

1915.

INDEX.

FOREST ADMINISTRATION REPORT,

MADRAS PRESIDENCY,

NORTHERN CIRCLE, 1913-1914.

Chapter.	Subject.	Paras.
I	Constitution of State forests—	
	1. Alteration in area	1 & 2
	2. Forest settlement	3
	3. Demarcation	4
	4. Forest surveys	5 & 6
II	Management of State forests—	
	1. Regulation of management—	
	(a) Preparation and control of regular working-plans ...	7 & 8
	(b) Annual plan of operations	9
	2. Communications and buildings—	
	(a) Roads and bridges	10
	(b) Buildings	10
	(c) Miscellaneous works	10
	3. Protection of forests—	
	(a) General protection	11 to 15
	(b) Protection from fire	16 to 18
	(c) Protection from cattle	19 & 20
	(d) Protection against injuries from natural causes ...	21
	4. Sylviculture—	
	(a) Natural reproduction	22
	(b) Artificial reproduction	23
	(c) Operations for the improvement of growing stock ...	24
	(d) Experiments	25
	5. Exploitation—	
	(a) System of management	26
	(i) Major forest produce	27 to 33
	(ii) Minor forest produce	34 to 37
	(b) Agency of exploitation—	
	(i) Government	38
	(ii) Purchasers	39
	(iii) and (iv) Right and privilege holders and Free grantees	40
	(c) Outturn and sources of forest produce	41
III	Financial results	42
IV	Administration	43 to 52
V	General	53 to 64
	Appendices A to G and Forms Nos. 65 to 85.	

FOREST ADMINISTRATION REPORT OF THE NORTHERN CIRCLE

FOR THE

FOREST YEAR ENDING 30TH JUNE 1914.

SUMMARY OF PROGRESS DURING THE FIVE YEARS 1909–1910 TO 1913–1914.

Administration control.—During the quinquennium ending with the year 1913–14 there was no alteration in the control. Mr. A. W. Lushington continued to be in charge of this Circle the whole period except from 13th April 1911 to 1st October 1911 when Mr. P. M. Lushington was in charge. The chief event in this quinquennium was the formation of a Forest Committee of four members with the Hon'ble Mr. W. O. Horne, Forest Member of the Board of Revenue, as President to consider and report on questions of grazing, provision of fuel and small timber and leaf manure; the orders of Government on the report have been received and their instructions are being attended to.

2. *Changes in the controlling charges.*—Bellary and Anantapur districts were transferred from this to the Central Circle. A new division in *Kurnool* has been formed; one in *Gōdāvari* district was sanctioned but not effected owing to shortage of officers. Three taluks—Cherla, Albaka and Nugur—were transferred from the Central Provinces to the *Gōdāvari Upper* division from 1st July 1909.

3. *Forest legislation.*—No forest legislation of importance was sanctioned during the period under review.

4. *Organization.*—The time scale pay for the Provincial officers was sanctioned and the executive and Protective staff was augmented during the period under review. The temporary staff of range clerks was made permanent and their pay raised from Rs. 15 to 20.

5. *Changes in area.*—The area under the control of the Forest Department has increased from 4,733 to 5,123 square miles. These areas are classified as follows:—

	At commencement of the period.	At close of the period.
	SQ. MLS.	SQ. MLS.
Reserved forests	4,638	4,614
Reserved Lands	94	507
Leased forests	1	2
Total ...	4,733	15,23

6. *Forest settlement.*—Settlement is practically complete except in Gōdāvari Upper where the forests transferred from the Central Provinces were renotified under the Madras Forests Act V of 1882. The total area settled during the period under review was 10 square miles. Owing to corrections of area, disafforestation, etc., the area finally settled at the close of 1913–14 amounted to 4,614 square miles only as compared with 4,638 square miles at the end of 1908–09.

7. *Demarcation.*—The total length of artificially marked boundaries at the close of 1913–14 amounted to 5,882 as compared with 5,697 miles at the commencement of the quinquennium. Only 98 miles remain to be demarcated for the forests already settled.

8. *Forest surveys.*—Only local surveys were carried out, where necessary, during this period. The total area surveyed up to the end of 1913–14 was 4,098 square miles.

9. *Working plans.*—During the quinquennium, working plans (including revised plans) were compiled for 696 square miles 1,435 square miles were under sanctioned Working Plans at the beginning of 1909–10 and 2,033 square miles at the close of 1913–14. In most districts the preparation of Working Plans was held in abeyance first pending order's of the Government on the recommendations of the Forest Committee; secondly pending classification of forests under those orders.

10. *Communications and Buildings.*—The average annual expenditure on communications, buildings and other works amounted to Rs. 92,371 during the period under review as compared with Rs. 52,071 during the previous five years. The increase is due to the opening up of the forests and to providing the staff, especially executive and protective in the districts with quarters. To bring this expenditure under better control, a programme of Roads and buildings for the next five years has been, or is being, drawn up for each district in the Circle.

11. *Forest offences.*—The average annual number during the quinquennium under review has risen to 3,496 as compared with 2,983 during the five years ending with 1908–09, due chiefly to better supervision and record. The cases of injury to forests by fire show an average annual increase of 83 cases and offences of unauthorised fellings and offences of a miscellaneous nature increased by 25 and 11 per cent. respectively, while the number of grazing offences remained almost the same.

12. *Fire protection.*—During the period under review the average area under systematic fire protection amounted to 1,523 square miles against 481 square miles in the previous five years ending with 1908–09 while failures in both the periods amounted to 20 per cent. Nevertheless it is believed that by the supervision and records now maintained the percentage of failure is far more accurately recorded.

13. *Protection from cattle.*—During the period under review the average area annually open to cattle other than browsers increased by 79 square miles or 2 per cent. and that open to browsers by 27 square miles or 27 per cent., the average areas open each year being 4,458 and 4,565 square miles respectively. During the same period the average forest area amounted to 4,964 square miles or 184 square miles (3·85 per cent.) more than during the previous quinquennium. The average number of all animals admitted to graze on payment increased from 582,164 in the previous quinquennium to 610,907 in the period under review. Of the former number 10,940 and of the latter 10,130 were browsers so that there was a decrease of 7 per cent. in the number of animals of this class admitted to pasture. The scheme for regulating grazing in the forests adjoining villages in which the grazing is the chief factor, for preserving forests almost purely for climatic purposes where remote from villages, and those that are valuable as producers of timber and fuel although not remote from villages, is pending preparation; the classification of forests according to the recommendations of the Forest Committee has not yet been quite completed. In the *Kistna* District certain grazing forests were handed over to be managed by village Panchayats as a trial.

14. *Yield and outturn.*—The following statement shows the average annual outturn of the forests for the two periods:—

	Timber and fuel.	Bamboos.
	C.FT.	NO.
1904–05 to 1908–09	6,696,410	15,901,177
1909–10 to 1913–14	6,538,579	16,109,700

The average annual outturn of timber and fuel decreased by 2 per cent. while the average number of bamboos extracted annually increased by 1 per cent. No comparison of the outturn of minor forest produce was attempted as figures for the districts of Guntūr, Bellary and Anantapur were not separately furnished in the annual returns.

15. *Financial results.*—The average annual financial results for the last two periods were as follows:—

—	Revenue.	Expenditure.	Surplus.
	Rs.	Rs	Rs.
1904-05 to 1908-09	7,06,544	6,80,072	+ 26,472
1909-10 to 1913-14	7,78,696	8,63,147	− 84,451

The average gross revenue for the period under review shows an increase, but the expenditure also has far increased during the period due mainly to the outlay of money on capital works such as construction of roads for transport of forest produce and buildings and plantation works especially in Kurnool West to provide work for the Chentsus, and other works of improvement. The augmentation of the subordinate staff and the time scale pay introduced for the Provincial officers also contributed to the increase in the expenditure. The permit system is only used for grazing and minor produce in all the districts of the Circle and a great advance has been made in the introduction of contract system for the exploitation of the major produce in the forests. This change has already resulted in leaving a surplus. In connection with the finances of the Circle during the quinquennium it must be borne in mind that Bellary and Anantapur—areas of great demand and little supply—at the beginning brought in large revenues; considerable portions of this revenue were utilized for works of great magnitude and importance in the Kurnools, and when those districts were transferred there was a considerable deficit. Orders have issued that the Circles are to be self-supporting; and expenditure is now being curtailed in *Kurnool*, although in a few years' time that district, with its three divisions, will produce a very large surplus revenue. It is only during this period of rest and development that the equilibrium has been shaken.

16. *Forest education.*—The deputation of students to the Forest College at Dehra Dun for the Rangers' course was discontinued and a College was opened at Coimbatore commencing from April 1912. The first final examination was held in March 1914 and among the successful students of this Circle one obtained honour's certificate and three secured prizes for proficiency in certain subjects. The school for training of Deputy Rangers and Foresters at Coimbatore was abolished and in its place a Vernacular Training School was opened in each Circle to give a course of instructions in Vernacular for Foresters and Forest Guards, and the course of instruction in this school extends only for six months in a year.

17. *Hill tribes.*—Considerable development has during the quinquennium taken place amongst the hill tribes—Khonds of Ganjām and Chentsus of Kurnool. When the former were originally taken in hand (some 6—7 years ago) they habitually burnt the forests and podu'd the hills by yearly clearances and cultivation, and did all in their power to prevent reservation and obliterate demarcation. Now podu is no longer, and they give great assistance in preservation and the elimination of fires. With the Chentsus, at first they stubbornly refused to do work of any kind for the Forest Department, and habitually burnt the forests; they never have been cultivators. The first work they undertook was digging holes for plantations; now some of the plantations are excellent; some were failures, but due to climatic and physical causes and not to the bad work of the Chentsus. In such localities (failures) they have taken recently to other works, cutting fire lines, fire protection generally, cutting back bamboos in areas requiring weeding from that species, construction of spokes and felloes, making bridle-paths, etc., whilst in the plantation areas some make bricks and lay brick channels. In the East division they undertake line cutting and path-work on contract. They are not altogether civilized yet; they got out of hand during the past year in the West division under an unsympathetic Forest officer, and burnt forests all round. They still require, for very many years to come, very firm treatment combined with personal sympathy. In spite of all this, their progress has been considerable. In Gōdāvari a start is being made with the Koyas and Reddis; the latter live along the river, and cannot be helped so much as the Koyas who live in the interior and away from the river; a start has been made, but this is all that can be said at present.

CHAPTER I.—CONSTITUTION OF STATE FORESTS.

1. Alteration in Area.

Class.	Area on 1st July 1913.	Added during the year.	Excluded during the year.	Net increase or decrease.	Area on 30th June 1914.
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
Reserved forests	4,614	28	28	..	4,614
Reserved lands	263	255	11	+ 244	507
Leased forests	(*a*) 1	1	..	+ 1	2
Total ..	4,878	284	39	+ 245	5,123

(*a*) 1·32 square miles of *Vizagapatam* district was wrongly omitted in previous years.

With the exception of the addition of six blocks of reserved lands in *Upper Gōdāvari* amounting to 255 square miles, the alterations by addition to, subtraction from, the different classes are so petty as to need no comment.

2. The total forest area under the control of the Forest Department was 5,123 square miles which (excluding zamindari and inam lands is 28·26 per cent. of the total area).

2. Forest Settlement.

3. To 16 blocks (259 square miles) at the commencement of the year, seven (255 square miles) were added, and eight blocks (5·13 square miles) were transferred to reserved forests and 1·72 square miles—portion of a block—were excluded at settlement; of 15 blocks (507 square miles) remaining at the end of the year one was pending with the Board one returned for revision, settlement was completed, but not reported to Board, for two blocks (145 square miles), and settlement was proceeding for 11 blocks (345 square miles) in *Gōdāvari Upper* (10) and *Kurnool South* (1).

3. Demarcation.

4. Thirty-eight miles of external demarcation was carried out in Ganjām at a cost of Rs. 854, and 825 miles were repaired at a cost of Rs. 6,465, and 4,146 miles were recleared by the Forest subordinates free of cost. The average cost per mile of fresh demarcation was Rs. 22–7–7 and repair Rs. 7–13–4 against Rs. 31–6–9 and Rs. 5–13–10 in the previous year, the increase under repair being mostly due to broadening certain interior lines in Kurnool East and Gōdāvari Lower. A sum of Rs. 779 was spent in *Gōdāvari Upper* on account of Dupati survey for payment of arrears of salaries and for alterations made in the boundaries according to the decisions passed on appeals.

4. Forest Surveys.

(*a*) *By Survey of India.*

5. No new work was undertaken during the year. Index maps for *Ganjam*, *Vizagapatam*, *Godavari Lower* and *Kistna* were published during the year and those for the three divisions of *Kurnool* are under different stages of preparation.

(*b*) *By Departmental Survey.*

6. During the year Rs. 10,580 were spent on forest surveys and maps were prepared for 5 square miles of reserved forests. The departmental work that was carried out during the year consisted chiefly of the verification of boundaries, alignment of roads and fire lines, and preparation of coupe and working plan and other maps.

Dupati survey.—In *Gōdāvari Upper*, of the 26 appeals remaining undisposed of in the previous year 16 were disposed of leaving 10 still pending.

CHAPTER II.—MANAGEMENT OF STATE FORESTS.

1. Regulation of Management.

(a) *Preparation and Control of Regular Working Plans.*

7. *Preparation.*—In most of the districts working-plans are in various states of compilation, delayed mostly by the preliminary of classification under the Forest Committee's report. In *Gōdāvari Upper*, one for Bhadrachallam taluk and in *Kurnool South* for Chelama, Giddalore and Sirvel ranges have been sanctioned; in *Gōdāvari Lower*, for three ranges they have been returned; in *Kurnool East* for six ranges awaiting completion of maps; and in *Ganjām*, *Vizagapatam* and part of *Kistna*, the remaining areas of *Kurnool South* and *Gōdāvari Upper* awaiting the approval of the said classification. In *Kurnool West* the remaining forests merely require protection.

8. *Control.*—The prescriptions of the working-plans were generally adhered to except in the following cases:—In Ganjām the accumulated balances of previous years were worked during the year and 5 bamboo coupes which were not provided for in the working-plan were worked. In *Gōdāvari Lower* minor operation in the Coringa reserve was not done. In the *Gōdāvari* and *Kistna* casuarina reserves, operations were not fully carried out as those plantations are to be abandoned. In Kondapalli reserve of *Kistna* the brushwood had to be burned as there was no sale therefor. In *Kurnool West* cultural operations were not carried out in a portion of coupe No. 13 of the Veldurti reserve as the soil was unsuitable.

(b) *Annual Plan of Operations.*

9. The sanctioned plans were generally followed, except as detailed under working-plans above, and in the following cases. Certain buildings were given up in *Ganjām*, *Vizagapatam*, *Gōdāvari Lower*, *Kistna* and *Kurnool South*, while others instead were taken up in *Ganjām* and *Kurnool South*. Extraction of timber, fuel and bamboos in *Kistna* and *Kurnool South* was undertaken by contractors while in *Ganjām* it still had to be done departmentally to some extent. In *Ganjām* the boundary line between Kaliamba and Rogodo was permanently demarcated to a distance of 5½ miles. In *Gōdāvari Lower* Prattipad-Peddipalem road was not taken up, and range quarters at Jangareddigudem not begun. In *Kistna* certain minor works in Bandar, Bezwada and Ellore ranges were given up. In *Kurnool South* Pacherla-Chelama road was abandoned, repairs to certain roads could not be completed for want of labour and contractors, a bridle-path was taken up instead of a road, and minor produce had to be collected departmentally in Giddalore range for want of bidders. In *Kurnool West* sowings in Yerramalais were modified and some of the coupes in Yerramalais were not felled.

2. Communications and Buildings.

10. The following figures compare the outlay on communications and buildings:—

	1912-13. Rs.	1913-14. Rs.
Roads and bridges	35,887	31,588
Buildings	49,113	43,789
Other works	5,605	8,869

The decrease under roads and buildings is due to greater scrutiny exercised in selecting works and postponing some pending the preparation of five years' programme of roads and buildings.

(a) *Roads and Bridges.*

The important works of a permanent nature executed during the year were the following:—

Ganjām.—Construction of 8 miles of road and the completion of the second bridge across the Odangi Nalla and the part-construction of a third bridge over the same.

Gōdāvari Upper.—Three roads were partly done and the cutting of 700 feet level line was completed and the whole of this line 130 miles was recleared.

Kistna.—Nallacherla-Kodigudem road and Errakuruva hill road were partly constructed.

Kurnool East.—A ghat road from Dornal to Peddachama and two bridle-paths were completed, and the cart-tracks from Dornal to Kalanutala and Ganjivaripalli to Donakonda Railway station were repaired.

Kurnool South.—A road from Terai line to Medamvanibhavi over a length of 3½ miles was constructed, and improvements were made to the Chelama-Baireni, Surva-Diguvametta and Gundlamotu-Sandrapodu roads.

Kurnool West.—A new cart-track 12 feet wide over a length of four miles from Gundlabrahmeswaram to Budithagundala was formed, and the improvements to the cart-track from Ayyavarikodur to Honkaram were completed.

(*b*) *Buildings.*

The important works of a permanent nature carried out during the year were the following :—Extra Assistant Conservator's quarters at Russellkonda, rest house at Gerada and rest-house at Chahali (nearing completion) in *Ganjām*, rest-house at Sudikonda in *Gōdāvari Lower*, two range offices one at Cherla and another at Venkatapuram (nearing completion) in *Upper Gōdāvari*, range office at Jangareddigudem in Gōdāvari Lower, range office at Pullalacheruvu in *Kurnool East*, temporary range quarters at Cherla in *Gōdāvari Upper*, subordinate quarters at Peddamantrala, Peddachama and Maddipenta in *Kurnool East*, subordinate quarters at Malkondapenta and at Ahobilam in *Kurnool South*, and additions such as outhouses, kitchens, stables, etc., to existing buildings, and sheds to house forest guards and watchers, etc.

(*c*) *Miscellaneous Works.*

The chief works done were the construction and repair of tanks, kuntas and wells, digging and widening channels. Bunds were also erected across streams and streamlets in the Gundlabrahmeswaram range in *Kurnool West.*

3. Protection of Forests.

(*a*) *General Protection.*

11. The following statement shows the number and classification of forest offences brought to light during the year :—

Class.	Injury to forest by fire.		Unauthorised fellings or appropriation of wood and minor forest produce.		Grazing without permission or in tracts in which grazing is prohibited.		Other offences.		Total.	
	1912-13.	1913-14.	1912-13.	1913-14.	1912-13.	1913-14.	1912-13.	1913-14.	1912-13.	1913-14.
Reserved forests and lands.										
Cases taken into court ..	8	9	516	428	186	174	49	51	759	662
Cases compounded ..	4	3	1,298	1,564	611	739	119	94	2,032	2,400
Cases undetected ..	139	176	92	130	6	5	3	4	246	315
Total ..	151	188	1,906	2,122	803	918	171	149	3,037	3,377
Unreserved lands.										
Cases taken into court ..	..	..	55	57	..	..	1	3	56	60
Cases compounded ..	2	2	510	547	..	3	3	40	515	592
Cases undetected ..	1	44	76	49	..	..	..	1	77	94
Total ..	3	46	641	653	.	3	4	44	648	746
Grand total ..	154	234	2,547	2,775	803	921	175	193	3,685	4,123

The number of cases reported was greater than in the previous year chiefly under unauthorized fellings and grazing without permission, the three *Kurnools* contributing mostly to the increase under these heads, the reason alleged being better supervision by the introduction of the gang system of patrolling recommended by the Forest Committee.

12. There were 585 cases pending at the beginning and 674 at the end of the year ; of these latter 156 were with Magistrates. Out of the cases brought to trial during the year, 722 ended in conviction, 76 in acquittal, against 877 and 93 respectively in the previous year ; the percentage of failure being 9·52 against 9·59 in the previous year.

Closure of forests to grazing for not reporting or preventing illicit grazing or other offences on a large scale.

13. Nowhere was the necessity found to close the forests on this account. As a result of the Sub-divisional officer's enquiry in respect of large numbers of standards illicitly cut and removed from the Musalimadugu coupe in the previous year in *Kurnool West*, the villages around the scheduled area in the Atmakūr range have all been notified under rule 4 of the Timber transit rules of the district.

14. Two thousand four hundred and ninety-four cases were compounded for Rs. 23,971 against Rs. 14,345 collected in the previous year on 2,302 cases compounded, the increase being due to the greater number of cases having been compounded in *Kurnool South* and *West*.

15. Rewards of Rs. 20, 10 and 5 were given in *Ganjām*, *Kurnool South* and *Gōdāvari Lower* respectively in certain timber theft cases and Rs. 68 in *Kurnool West* in certain illicit goat-browsing cases. Rewards to an extent of Rs. 350 were paid to Chentsus of Sudem, Pangidi and Rudracode in *Kurnool West* for protecting the forests from fire.

(*b*) *Protection from Fire.*

16. The areas attempted and protected are given in Form No. 72. The system of protection was the same as usual, except in *Kurnool South* where 7 miles of fire line in Giddalore range were cleared by purchasers, thereby producing revenue, instead of expenditure on such operations, a great step in advance. In *Ganjām* the Khonds allowed the usual concessions, assisted in extinguishing fires, fire patrols being employed only where they were not available. The fire season was a mild one and, although there were extensive fires in adjoining private forests, there were very few fires in Government forests, except in Buguda range, owing to the 60 feet exterior lines. The 20 feet line round Pondakhol reserve is being widened to 60 feet. In *Vizagapatam* also it was favourable season, only 25 acres being burnt out of 68,000 acres attempted. In *Gōdāvari Upper* large areas were burnt owing to the long duration of the hot weather during which time the heat was intense. Here fire protection on proper lines is only just commencing. In *Gōdāvari Lower* the services of the hillmen were utilised more in protecting the forests and in only one instance did they prove refractory and refuse to render assistance in putting out a fire ; the fires originating inside the forests are stated to be principally due to the hillmen (including settlers in the Agency tracts) being permitted to shoot and hunt in all reserved forests except in Papikonda where game rules apply. In *Kistna* 1,665 acres were burnt against 368 acres in the previous year, the increase being due to want of rain. In *Kurnool East* two large fires took place, one in Gudem range at Teluguirayanicheruvu and the other in the sandalwood area of the Morricheruvu range, and both of these are supposed te have been started by Chentsus from outside. The Chentsus in the Gudem range, however, co-operated very well with the department in reducing the fires within the Gudem limits ; there are six gudems in this range demarcated by fire lines, and each gudem looks after its own area, and in return the Chentsus of the gudem are given, as reward, cloths free if the whole area is successfully protected or are exempted from payment in proportion to the extent of forests saved by them. In other parts of the division, a fire line between the grazing and non-grazing areas was cut at a cost of Rs. 3,566. In *Kurnool South* the fire lines in the Chelama and Gundlakamma ranges are kept clear of growth throughout the year by the employment of a permanent gang of fire patrols. Two hundred and eighty-six square miles were protected out of 347 attempted ; no fire tracing was permitted after the month of January. In *Kurnool West* a new fire line from Honkaram to Korakajonai was formed. Fires were said to be caused by the Chentsus of Rudracode and Passurutla out of jealousy as those in Pangidi and Sudem were granted rewards, by the Mahratta coolies working

on the Siddapur tank project, by the Chentsu warrantees of Pangidi who cleared the forest for free movement and thus evade arrest by the police. As a matter of fact, owing to a change of officers, the Chentsus of this division got out of hand. In Yerramalai ranges the results were encouraging, the stone walling doing much good in protection.

17. Rs. 54,534 were spent on fire protection during the year. The area dealt with was more or less the same as in the previous year, viz., 4,479 square miles, of these 3,898 square miles were successfully protected against 3,745 in the previous year; the proportion of failures fell to 12·97 from 16·39 in the previous year, the cost per square mile successfully protected fell to Rs. 13–15–9 from Rs. 15–5–11, in the previous year.

18. Appendix D shows the number and origin of fires.

Though the number of fires was greater under all the heads except under "Causes unknown" the area burnt was less than in the previous year, *Vizagapatam* and the three *Kurnools* giving a larger area protected.

(*c*) *Protection from Cattle.*

19. Out of 5,123 square miles, 952 were closed to all animals throughout the year against 898 in the previous year, *Kistna* and *Kurnool East* contributing mostly to the increase. Thirty seven square miles (in *Kistna* only) were open to goats against 155 in the previous year.

20. Appendix E shows the number of cattle impounded during the year compared with the average of the three years preceding. The averages show marked decrease in *Kurnool South*, *Kurnool West* and *Vizagapatam*, and the past year's figures show rise in the same districts.

(*d*) *Protection against injuries from natural causes.*

21. In Ganjām damage by root fungus to casuarina trees in Agastinowlgam plantatation was inconspicuous. The attack of jacids on teak leaves remained local in *Gōdāvari Upper*; and the casuarina trees attacked by root fungus in *Gōdāvari Lower* were removed and sold. In *Kurnool South* many palmyra trees in the Mundlapad reserve have died from drought and borer.

4. Sylviculture.*

(*a*) *Natural Reproduction.*

22. Reproduction of seedlings in *Ganjām* was astonishing; of all the important species such as teak, etc., good in *Gōdāvari Upper* and *Lower* though Kondatangedu seeded sparsely in the former district; in *Vizagapatam*, of yegisi, nallamaddi in the Sanivaram reserve, kondatangedu, billudu elsewhere very profuse; in *Kistna*, the Bezwada Range and in the unburnt closed areas of Ellore Range excellent; in *Kurnool East*, in the protected areas of the Gudem range, of nallamaddi, tuniki billudu, etc., fair; of only yepi in *Kurnool South* profuse; in *Kurnool West* in the Yerramalais, Nandyal and Pecheruvu ranges very poor owing to scanty rainfall and in the first due also to want of proper protection, but a large number of seedlings of yepi, jittegi and nallamaddi all over the area in the Velgode Range where cover has been removed were noticeable. Reproduction from coppice shoots and root suckers in *Ganjām* was excellent directly an area was protected for a year or two from fire; in *Vizagapatam*, and *Gōdāvari Lower*, good in all the coupes worked over; in *Kistna* good in Ellore and Bezwada Ranges. The reproduction of mangrove forests in *Gōdāvari Lower*, and *Kistna* was fair. In *Kurnool West* in the Nallamalais coppice shoots were vigorous in the coupes of coppice Velgode, Nandyal and Atmakur ranges, those of teak, yepi, yegi, nallamaddi, billudu, chirumanu came on well, but fires in the timber coupe of the last Range did a lot of harm.

* List of trees with their scientific names will be found in Appendix G.

(*b*) *Artificial Reproduction.*

23. Form 75 shows the areas under plantation and topes or subject to cultural operations.

Regular plantation.—In *Gōdāvari Lower* and *Kistna*, no planting work was done in the casuarina, plantations as the reserves were ordered to be abandoned; but the previous years plants were maintained. In *Kurnool East*, the existing five plantations yielding very poor results, no new areas were added; seedlings of teak, yegi, sandal, red sanders raised in nurseries were however planted in the rainy season to replace casualties in the existing plantations. In Maddipenta and Chinnamantrala plantations some trees were cut and removed to afford more light and air. These plantations, started originally to get Chentsus work at any thing at all, are now being given up, as we are now getting the Chentsus to work at different, and more useful, forest works, such as line cutting, fellings, bridle-path making, fire protection and so forth. In *Kurnool South*, the plantation at Ahobilam was given up on account of scarcity of water though the surveying plants were kept alive. The same remarks as regards the Chentsus as stated above holds good. At Diguvametta the existing plants of sandal, teak, yepi, etc., previously planted, and also more recently undertaken by the Vernacular Training School were maintained. In *Kurnool West*, the seven plantations at Nagaluti, Pecheruvu, Passurutla, Rudracode, Pangidi, Sudem and Honkaram were maintained. Further work at Honkaram and Bairluti was stopped from 1st April, only the casualties being replaced. In Nagaluti 30 acres were planted with 75 per cent. of teak, 10 per cent. neem, and 15 per cent. of mixture of yegi, nallamaddi and chinduga in a regular order and the plants are thriving well. A brick channel over a length of three furlongs was constructed to facilitate good flow of water.

19½ acres at Passurutla, 35½ acres at Rudracode, 21 acres at Pangidi and 30 acres at Sudem were clear felled and planted with teak and neem only in the proportion of 17 to 3; teak thrives well, its growth being rapid and immune from damage by cattle. The tallest teak plant of one year's growth was found in Rudracode to be 12 feet high. The plants in Sudem are doing well, those in Pangidi better than in the previous year and in Rudracode the growth was moderate. At Passurutla the growth of teak above Wood's line is better than that below due to nature of the soil; the soil further down varying in quality, there were casualties of 20 to 30 per cent., which will be replaced by neem seedlings as neem seems to suit the soil and helps to serve as fire protective measure. By decrees here too the plantations will be put a stop to utilizing the Chentsus on other works.

Cultural operations.—*Godavari Upper*, 74 per cent. of the teak, etc., species sown in four localities are reported to be surviving. *Godavari Lower*, no further sowing of Mada seeds in the Coringa reserve was undertaken. *Kistna*, teak, red sanders, sandal, etc., sown in coupes were failures, but where seedlings were transplanted they are thriving. Babul, mada, and tanduga seeds were sown in six reserves in the coast range of Bandar with varying results. *Kurnool West*, an extent of 10 acres was grown with neem under the mound and trench system in the terai forests near Indireswaram to provide work for the Chentsus there. The seedlings came up well during the monsoon but withered away during the hot weather. The Chentsus will hereafter be employed on other works. In the Pecheruvu Range 210 acres were sown with sandal, besides 250 acres which were fenced in the previous year.

(*c*) *Operations for the improvement of growing stock.*

24. Improvement felling, thinning, coppicing, clear felling, cleaning and weeding and removing deadwood for the improvement of growing stock are detailed under exploitation.

Creeper cutting—was as usual carried out by the subordinates in *Ganjām* and *Gōdāvari Lower* and creepers and thorny bushes were systematically removed in

all the coupes prior to felling by contractors, and *fencing* with prickly-pear was undertaken in two reserves in *Kistna*; in *Vizagapatam* prickly-pear was eradicated from two reserves, creeper cutting, bamboo weeding, sowing with superior species of superior classes, were undertaken in the Gundlabrahmeswaram Range in *Kurnool West.*

(*d*) *Experiments.*

(i) On species.

25. *Sandal.—Ganjām:* Experiments in Russellkonda and Bontha do not promise well. *Vizagapatam:* Sandal germinated well at Natavaram, Kondasantha and Sanivaram; and the trees put down some years ago in the compounds at Narasapatam and Natavaram are flourishing. No fresh sowings were undertaken in the compound of the Conservator's office, Waltair, and the previous year's plants are doing well. *Gōdāvari Lower:* Sandal seeds were dibbled in Devancheruvu Blocks I and II Mallavaram and Lakkonda and several other reserves and in the compounds of the Collector's office at Cocanada and Mallavaram Rest House, the germination was very satisfactory; some died off in the hot weather but a fair number are holding their own and some in the Lakkonda reserve in September 1913 germinated in June 1914 after lying dormant for a period of nearly nine months. *Kistna:* 1,000 sandal plants that were transplanted in different coupes in Bezwada Range in the compound of the Kondapalli Palace bungalow and in the Ungatur Block I of Ellore Range are doing well.

Mahogany—Kurnool West.—Sowings were abandoned as this species does not appear to be suited to the locality.

Red sanders—Ganjam.—Red sanders in Napier's Park continue to thrive. *Vizagapatam*: out of 345 Red sander plants which survived as reported in the previous report only 135 so far as could be ascertained remained. The plants transplanted in Ungatur Blocks I and II are doing well in *Kistna.*

Log wood.—Those put out in Kandikuppa reserve in 1911–12 still thrive in *Gōdāvari Lower*, and trees at Waltair in the Conservator's compound continue to do well.

Divi Divi.—In *Godavari Upper* at Sengaram and Tunikicheruvu and Edugurallapalli are thriving.

Rubber (1) *Para.*—The few rubber plants in the compound of the rest house at Sanivaram are thriving very well in *Vizagapatam* and out of 44 rubber plants surviving at Pandirimamidi at the close of the previous year three died, leaving 41 at the close of the year.

(2) *Ceara.*—Introduced at Osurabondho in *Ganjam* had a seed year and natural regeneration was abundant and the tree seems to thrive exceedingly well.

Cocoanut.—The plants planted in the sea-receded area adjoining coupes XII and XIV of the Gopuvanipalem reserve in *Kistna* are doing well.

Edible date, Godavari Upper.—The oldest date tree in the Murmur bungalow compound is doing well but those at Kunavaram and Boddigudem have died.

Loquat, Apple, Litchi and Mango in *Vizagapatam* which were introduced in the compouud of the Sanivaram rest house are doing well.

Pinus longifolia.—Out of 1,097 seedlings surviving in the Sanivaram rest-house compound in *Vizagapatam* at the beginning of the year, 627 died leaving 470 at the close of the year. The plants were put out on the hill side at Sanivaram and were doing well.

(ii) Other points.

(*a*) *Test of annual increment—Ganjam.*—With a view to determine the quantity of annual regrowth that grows in a year on scrub jungle in the Mohiri hills in connection with cattle browsing statistics one acre in both Rampalle and Ramaguda fuel coupes clear felled in 1912, was cut over, and the result gave 15 cwts 88 lb. in Rampalle and 10 cwts. 24 lb. in Ramaguda coupes.

5. Exploitation.

System of Management.

26. The total area for which regular working plans were sanctioned was 2,033 square miles and the area dealt with under different sylvicultural systems are detailed below :—

Sylvicultural system.	Area in square miles.	Per cent.
(1) Clear felling	136	6·7
(2) Selection felling	438	21·5
(3) Simple coppice felling	23	1·1
(4) Coppice with standard felling	276	13·6
(5) Improvement felling (mostly selection)	49 *	2·4
(6) Unworked area	1,111	54·7
Total ...	2,033	100

(i) Major Forest Produce.

(1) *Clear or Regeneration Fellings.*

27. Compartment 2 of Kandikuppa and 7 of Bendamurlanka were clear felled in *Gōdāvari Lower* with a view to disafforestation of the latter and the disposal of the stock before the disafforestation of the former; three coupes in Bezwada, six in Ellore and two in Bandar ranges in *Kistna* and the areas to be planted in the regular plantations in *Kurnool West* treated under this system.

(2) *Selection Fellings.*

28. Seventy sal trees of 7½ feet in girth and more were felled in *Ganjām* 50 of these being the unworked balance of previous years, and 4,211 dead and dying sal trees were selected in the same district and felled. The indent system for the disposal of valuable species in unreserves has been working satisfactorily and the demand is brisk. Four hundred acres of the Beddadavole reserve in *Gōdāvari Lower* and 10 acres in each of three reserves in *Kistna* were treated under this method. A palmyra coupe of 1,000 mature trees was sold for the first time during the year in Chinaganapalli reserve in *Kurnool East*. In *Kurnool South* dead or dying palmyra trees in the Owk Palmyra extension reserve were felled and in the Mundlapad reserve were marked and sold standing. Deadwood was collected from the old coupes in Chelama range and from the fire lines in the division: a further advance was made in the contract system by selling standing the produce on lines that had to be cut (as fire lines, etc.) at most profitable rates. In *Kurnool West* dead timber continued to be removed from the hill forests.

(3) *Regular Thinnings.*

29. Two compartments in *Godavari Lower* were thinned and bamboos in the leased out coupes in *Kurnool East* and *West* removed as usual.

(4) *Improvement Fellings.*

30. In *Ganjām* six bamboo coupes in Goomsur and two in Berhampur were treated, the cleaning of clumps being done simultaneously with the extraction, leaving 4 to 8 culms per clump. In *Gōdāvari Lower*, besides 38 acres of compartment X of Kandikuppa (casuarina) plantation which were cleaned, operations were conducted in three reserves where deadwood and bamboos were removed for the improvement of the growing stock. The right to fell and remove bamboos from compartments I to 8 in Kondapalli and coupe two of series I and II of Kondur reserve were leased out to contractors in *Kistna*. In *Kurnool East* dead timber and fuel were extracted from the forests and sold to contractors: 2,139 sets of spokes and felloes were prepared from dead teak and Yogi trees: in two coupes dead trees were marked for extraction by contractors to whom they were sold standing. In *Kurnool West*, old hollow and crooked trees were cut back and provided small timber and agricultural implements.

* Coppice with standard also was worked on 44 square miles.

(5) *Coppice with Standards.*

31. Six fuel coupes in *Ganjām*, 394 acres in *Vizagapatam*, eight coupes in the Coringa reserve in *Gōdāvari Lower*, three coupes in Kondapalli reserve in *Kistna* and two in *Kurnool South*, were worked under this system.

(6) *Simple Coppice.*

32. Five fuel coupes in *Gānjam*, II in *Gōdāvari Lower* were treated under this system. In *Kurnool East* in Maddipenta 1,000 stumps of stolen trees which showed signs of vigorous coppicing were properly coppiced and trimmed.

(7) *Unregulated Fellings.*

33. In *Vizagapatam* permits for timber, fuel and bamboos were issued for removal from unreserves and under direct supervision bamboos were similarly removed from selected coupes and the removal of a certain quantity of timber from the Bointi unreserved forest was given on contract. In *Gōdāvari Upper* the right of cutting timber from unreserves which were roughly divided into coupes according to natural boundaries in the Bhadrāchalam, Marrigudem, Pulusumamidi and Lakkavaram ranges was leased out for Rs. 21,700 and the removal of bamboos from the last three ranges was leased out for Rs. 6,975. In *Godāvari Lower* the unregulated fellings were confined to Rampa and to certain unreserves under the control of the department, and in *Kurnool West* permits were granted for the removal of palmyra trees from certain reserves.

(ii) Minor Forest Produce.

(1) *Miscellaneous Produce.*

34. In all districts seigniorage was collected on gravel, earth and other minerals. The usufruct of mango, tamarind and other fruit trees was sold in auction: the collection of tangedu and other barks, honey wax, myrobalans, hides, horns, etc., was leased out. The chief deviations were—In Ganjām, the enjoyment of the fruit trees, mango and tamarind, in the majority of cases was left free for the Khonds: and Kamala powder and Mowha seeds collected by them were purchased by the department and disposed of profitably. In *Vizagapatam*, seigniorage was collected from purchasers from hillmen at weekly markets except in Palkonda range where all the minor forest produce (save grass cut and sold departmentally) was removed by purchasers on permits. In *Godavari Lower*, tamarind and soapnuts in Rajahmundry and Gokavaram ranges were collected departmentally to frustrate combination at auction. In the *Kurnools* Chentsu agency was mostly employed, viz., *East*, tamarind, soapnuts, myrobalans, musti seeds, wax, sambhur and deer horns, etc., and these were sold in auction at Kurnool: *South*, these were collected only in the Giddalore range, and *West*, honey, wax, hides, horns, etc., were collected.

(2) *Extraction of Fodder.*

35. In *Gōdāvari Lower* cutting of fodder and thatch grass in Coringa reserve was leased out; while in other reserves free removals were permitted for domestic and agricultural purposes. In *Kistna* collection of fodder grass from closed areas was leased out. In the three *Kurnools* removal of grass free in head loads and on payment for cart loads was continued and for about three months during the year free removal of grass in cart loads also was allowed owing to the failure of the monsoon.

(3) *Hay-making.*

36. Hay making was not undertaken anywhere except in *Kurnool South* where fodder grass was collected at a cost of Rs. 268 for feeding Government bullocks in the Gundlakamma range.

(4) *Grazing.*

37. The permit system was in force in all the divisions. The revenue derived was Rs. 1,24,742 against Rs. 1,28,898 in the previous year and the fall is attributable: in *Gōdāvari Lower* to the opening of private kanchas in the Peddapur range, and to the less number of Delta cattle taken to Rampa owing to insufficient rainfall: in

Kistna, to the closure of half the forests in Bezwada and Ellore ranges: in *Kurnool South*, to the closure for the last quarter of the year of Uyyalavada and Sirvel reserves under the prescriptions of the sanctioned preliminary working plans.

(*b*) *Agency of Exploitation.*

(i) Government.

38. Form 76 and 77 show separately the different classes of produce collected and Form 78 the stock disposed of and the balance remaining. The total quantity of timber and fuel, the number of bamboos and the value of minor produce extracted departmentally were 20·55, 6·38 and 3·85 of their respective total outturn through all agencies, and the total value of the disposals was Rs. 1,35,120 against Rs. 2,19,471 in the previous year. The fall is due to leaving the removals to a greater extent to contractors. Transport was as usual. The quantity of timber, fuel and bamboos extracted was 280,305 cubic feet, 1,459,059 cubic feet and 882,151 against 323,766 cubic feet, 1,460,144 cubic feet and 4,046,737 respectively in the previous year; the fall is due to substitution of contract for departmental agency. Minor produce collected was 89,509 maunds against 95,814 in the previous year.

(ii) Purchasers.

39. There has been marked increase in the removals by purchasers under the three major heads timber, fuel and bamboo by the engagement of contractors in place of departmental extraction. Driftwood was sold in auction in *Gōdāvari Lower* and *Upper*.

(iii) & (iv) Right and Privilege Holders and Free Grantees.

40. The following statement shows the estimated quantity and value of produce removed under the above heads:—

Agency.	Timber.		Fuel.		Bamboos.		Minor produce.	Grazing.	Total.	Value in the previous year.
	Cubic feet.	Value.	Cubic feet.	Value.	Number.	Value.	Value.	Value.	Value.	
		Rs.		Rs.		Rs.	Rs.	Rs.	Rs.	Rs.
Right and privilege holders.	189,507	4,660	792,444	7,326	80,953	330	23,570	1,079	36,965	26,612
Free grantees	48,304	2,544	..	..	44,535	454	77	..	3,075	5,176

(*c*) *Outturn and Sources of Forest Produce.*

Agency.	Timber in cubic feet including sandal-wood.		Fuel in cubic feet.		Bamboos in number.		Minor produce (including grass and grazing) gross value in rupees.	
	1912–13.	1913–14.	1912–13.	1913–14.	1912–13.	1913–14.	1912–13.	1913–14.
1	2	3	4	5	6	7	8	9
Government	323,766	280,305	1,460,144	1,459,059	4,046,737	882,151	10,628	10,750
Purchasers (including confiscation).	1,225,178	1,813,968	2,991,914	3,877,747	10,668,814	12,806,046	2,43,732	2,43,438
Right holders	807	189,507	154,806	792,444	12,293	80,953	23,582	24,649
Free grantees	22,643	48,304	..	..	47,670	44,535	107	78
Total ..	1,572,394	2,332,084	4 606,864	6,129,250	14,775,514	13,813,685	2,78,049	2,78,915

41. The variations have been explained where necessary. The rates for grazing fees levied in the several districts are shown in Form 74 The number of animals licensed to grazing on permit was 629,218 against 644,555 in the previous year.

CHAPTER III.—FINANCIAL RESULTS.

42. The financial results of the Circle compared with those of last year and the average of the five preceding years show a net increase of Rs. 1,06,847 and Rs. 1,39,541 respectively.

—	1913-14.	1912-13.	Average of preceding five years.
	RS.	RS.	RS.
Revenue	7,78,973	7,83,196	7,71,083
Expenditure—			
" A. Conservancy and Works " inclusive of " Refunds."	3,73,394	4,47,803	5,33,029
" B. Establishments "	3,60,521	3,97,182	3,32,537
Total expenditure ..	7,33,915	8,44,985	8,65,566
Net results ..	+ 45,058	— 61,789	— 94,483

The gross receipts were less than those of the previous year and higher than the average by Rs. 4,223 and Rs. 7,890 respectively.

The A. expenditure is less than that of the previous year and the average by Rs. 74,409 and Rs. 1,59,635 respectively. The net results show an increase of Rs. 45,058, which is due chiefly to the change of system from departmental to contract working.

The above figures do not show the true working of the year, as the revenue is solely interest on our capital whilst the expenditure under " A. Conservancy and Works " show large amounts for " Capital " expenditure; and a true balance sheet should merely show the interest on that capital. Working it out in this manner, the following results earfar more accurate:—

			RS.
Total revenue for the forest year ending with 30th June 1914 ...			7,78,973
	RS.		
A. " Conservancy and Works "	3,65,066		
Deduct all " capital " expenditure as per details given below:—			
	RS.		
A VI-*c* Rs. 12,484 less 10 per cent. for repairs Rs. 1,248	11,236		
A VII-*a*	24,702		
A VII-*b* Rs. 28,529 less expenditure on petty works Rs. 5,791	22,738		
A VII *c*	2,520		
A VIII-*a*	8,511		
A VIII-*b*	1		
A VIII *e* Rs. 46,647 less establishment Rs. 7,068	39,579		
A VIII-*f*	19,314		
A VIII-*g* Rs. 14,872 less establishment Rs. 4,608	10,264		
		1,38,865	
Balance ...		2,26,201	
Add 4 per cent. interest on " capital " expenditure of Rs. 1,38,865		5,555	
B. Establishment		3,60,521	
			5,92,277
Surplus ...			1,86,696

It will be seen herefrom that the *true* working of the year should show a surplus of Rs 1,86,696 and not Rs. 45,058 only. The total receipts and expenditure for the year fell by ·54 and 13·14 per cent., respectively.

About 42 per cent. of the expenditure was devoted to the upkeep and improvement of the forests and 58 per cent. to exploitation, etc. It will be observed that the value of timber and other produce at sale depots at the close of the year amounted to Rs. 29,363 which was Rs. 3,867 higher than it was at the close of the previous year.

The outstanding revenue at the beginning of the year was Rs. 86,657 and the value of the sales amounted to Rs. 7,57,500. Out of the total of Rs. 8,44,157 Rs. 7,78,973 were collected, leaving an outstanding balance of Rs. 65,184 at the close of the year.

RECEIPTS.

(i) *By Departmental Agency.*

Timber.—Rs. 20,053 due to abandoning the departmental operations and to lower rates obtained at sales in coupes and full area not being worked in Atmakur and Velgode Ranges for want of demand.

Fuel.—Rs. 31,622 due to leasing of coupes to contractors and to the cancellation of the contract for the Kurnool supply from Musalimadugu coupe.

Bamboos.—Rs. 34,731 due to leasing of coupes to contractors.

Minor produce + Rs. 2,055 due to sale of Bassia latifolia seed and larger quantity of Kamala powder and grass in Chinnamangalapuram tope.

(ii) *By Purchasers.*

Timber + Rs. 37,250. Due to larger sales of trees on darkhast lands and larger removals from Rampa unreserves.

Fuel + Rs. 26,135. Due to leasing of more coupes to contractors and keen competition at sales.

Bamboos + Rs. 16,244. Due to larger sales of coupes to contractors, and introduction of enhanced rates for removals from Rampa, etc., forests.

Grazing and fodder grass — Rs. 4,156. Due to smaller number of cattle sent from Delta to Rampa owing to want of rains, to opening of grazing areas by private owners and to closure of half the forests in the Bezwada and Ellore ranges.

Other produce — Rs. 6,478. Due to smaller amount fetched by the disposal of usufruct of trees, etc., from unreserves by the Revenue Department.

(iii) *Miscellaneous (including confiscated drift and waif wood).*

Revenue + Rs. 11,133 due to sale of large quantities of timber confiscated in Sundaresa Ayyar's case, and sale of five cargo boats in the Rajahmundry range.

EXPENDITURE.

A.—Conservancy and Works.

The total expenditure was less than that of the previous year by Rs. 74,108 and was chiefly due (1) to leasing of coupes to contractors, (2) curtailment of expenditure on "Capital" works, (3) to close of expenditure on Dupati Survey operations and (4) to restricted payments for fire line clearing.

B.—Establishment.

The decrease of Rs. 36,661 was due to the services of Vizianagram Forest Settlement-officer and his establishment having been dispensed with and posting of junior officers.

CHAPTER IV.—ADMINISTRATION.

43. *New District Forest charges.*—There were no changes during the year.

44. *New ranges.*—There were some changes in the territorial distribution of the Ranges in *Lower Gōdāvari*, the reconstituted Ranges being named Rajahmundry, Peddapur and Gokavaram with effect from 1st October 1913.

45. *Conduct of the Executive Establishment.*—The conduct of the Executive staff is on the whole satisfactory.

Good conduct.—The work of Rangers Abdul Kalak Sheriff, N. S. Ananta Acharlu, S. Ramaswami Ayyar, H. Rama Rao, A. Kristna Rao, P. V. Subba Ramayya, R. Veeraswami Nayudu, K. P. Benjamin, K. G. Belliappa and Deputy Ranger C. T. Tiruvengadam is specially commended.

Bad conduct.—Two Rangers and seven Deputy Rangers were removed, one Ranger and three Deputy Rangers were suspended, one Ranger was temporarily reduced, and one acting Deputy Ranger was reverted to his permanent post.

Protective staff.—The conduct of this branch still continues unsatisfactory except in *Vizagapatam*, *Kurnool East* and *South*. It is hoped that better supervision under the Gang system will improve matters; this system is only starting.

Prosecutions.—Two forest guards were prosecuted for theft and convicted and two others for conniving at the illicit removal of timber, but acquitted.

Removals and minor punishments.—Eight forest guards were dismissed, 23 removed, 34 suspended; and 4 reduced whilst among other minor subordinates there were five dismissals, 47 removals, 31 suspensions and one reduction.

Foresters.—On the whole they are reported to have worked well; removals three suspensions two and reductions two.

Ministerial establishment.—The conduct of the ministerial establishment was on the whole satisfactory. One clerk of the District Forest office was reduced and reverted to his permanent appointment. Another clerk of the District Forest office and one Range clerk were reduced temporarily for five months and one month respectively. One District Forest office peon was reduced and suspended and one Range peon was removed.

46. *Health of establishment and casualties.*—The health of the establishment was bad as usual in all the districts except *Vizagapatam*, *Kistna* and *Kurnool South*. One Ranger died of Blackwater fever; one forester, nine forest guards, two watchers, four tanadars, two permit issuing gumastahs, one Range clerk and one peon died of fever. One Range peon died of cholera; one forest guard and one District Forest office peon were invalidated. Several subordinates had to take leave on account of ill-health.

47. *Relations between Revenue and Forest officials.*—The relations between the Revenue and Forest officials were cordial in all the districts.

48. *Service books.*—These were maintained and verified in all the districts.

49. *Tours of the Forest Member.*—The Forest Member visited the *Lower Gōdāvari* and Kistna districts during the year.

Conservator's inspection.—Mr. A. W. Lushington was in charge of the Circle throughout the year. Two hundred and sixty-four days were spent in camp by him. He visited all the districts and inspected all the District Forest offices.

Touring of the District Forest Officers.—All the District Forest Officers except that of *Gōdāvari Upper* and *Kurnool West* spent more than six months in camp. The short touring of the *Upper Gōdāvari* District Forest officer was due to the fact that Mr. Seager held charge of both this division and the *Lower* division for three and half months and was not able to tour in this division. In *Kurnool West* just the minimum was done by Messrs. Wood and Barry who held charge of the division during the year.

Inspection of Range offices.—All the Range offices were inspected except one in *Kurnool East.*

Audit of accounts of District Forest offices.—All the District Forest offices except those of *Lower Gōdāvari*, *East* and *West Kurnool* were inspected by the Auditors from the Accountant-General's office and the results were reported to be satisfactory.

50. *The Madras Forest College.*—Six Government students were deputed to Ranger's course commencing from 1st August 1914. Out of the eight returned during the year, one obtained Higher standard certificate with honours, six Higher standard and one Lower standard certificates. Ranger Sarma obtained the Botany prize, Ranger King the Campbell Walker prize and Ranger Ganapati the Brazier prize.

Vernacular Training School for Foresters and Forest Guards.—The school was opened at Rudravaram (*Kurnool South*) on 1st February 1914 with Rangers Messrs. Bastian and Snaize as instructors. Out of nine foresters and 17 forest guards deputed, nine foresters and three forest guards obtained higher and the remaining lower class certificates. The Forest Commissioner and Mrs. Vernon kindly superintended, and undertook, the giving away of the certificates and prizes.

51. *Work and service of superior officers.*—The following Collectors have commented on the work of their District Forest officers.—

Ganjām.—Mr. Bennett's was excellent as usual. Mr. Minchin is a keen and energetic young officer and is rapidly making himself acquainted with local conditions. The work of Mr. Gaudoin was satisfactory.

Gōdāvari, Upper.—Mr. Rigold takes keen interest in his work and will no doubt greatly improve the state of the division.

Gōdāvari, Lower.—Mr. Seager continued to show great interest in his work and gave complete satisfaction.

Kistna.—Mr. McLaughlin continues to give satisfaction.

The Collectors of *Vizagapatam* and *Kurnool* have nothing to report on the work of the superior officers; but both Messrs. Madan and Thompson have worked very keenly and energetically in their respective divisions.

52. *List of vernacular names of trees.*—This is still in the Press and expected to be published shortly.

CHAPTER V.—GENERAL.

(*a*) Rules under the Forest Act.

53. *Timber Transit Rules.*—(i) The rules worked well in all the districts. The Collectors of *Ganjām* and *Gōdāvari* submitted amendments to the rules called for in Board's Proceedings Forest No. 200, dated 22nd September 1913; but no orders of Government have been received. In *Vizagapatam* a large number of private owners of forests started working them for the first time during the year without making themselves acquainted with the revised rules. This necessitated the institution of a number of cases. The rules have however since become better known and are now working more satisfactorily. In *Gōdāvari Lower* the amendments to the river transit rules reducing the number of checking stations on the Gōdāvari river and simplifying the method of check were brought into force during the year. In *Kurnool*, the villages around the scheduled area in the Atmakur range were notified under rule 4 of the Timber Transit rules owing to large illicit removals from the Musalimadugu coupe, and this had a wholesome effect. In Kurnool and Pattikonda ranges fraudulent removal of forest produce from the Government reserves goes on under the cover of the manuscript permits in Form No. II issued by some jagirdars. Proposals to notify these jagirs under rule 4 of these rules are now before the Collector. But modification in the areas of these ranges, on the one hand, and proposals to meet the demand in both Yepi fibre and fodder leaves on the other, now under contemplation, may tend to rectify these offences.

(ii) *Rules under section* 26 *of the Forest Act.*—The privileges allowed by these rules were generally availed of by the people and there were no complaints nor abuses except in *Vizagapatam.* In *Vizagapatam*, fourteen cases were reported, out of which eight were convicted and four withdrawn; of the remaining two, one was acquitted and another is still pending. In *Gōdāvari Lower*, the Government Agent enquired fully into the complaint of the hillmen of the Polavaram range regarding restrictions placed on podu cultivation and ordered that no podu cutting should be permitted within a distance of one chain from any reserve boundary. In *Kurnool West* there were much illicit cuttings in the unreserved lands of the Yerramalai ranges, which, however, may be reduced by the proposals suggested above.

(iii) *Rules framed for the collection and disposal of drift-wood.*—These rules continued to work smoothly; but as a result of the decision of the Madras High Court in Civil appeal No. 2053 of 1912 an application has been made for legalising the rules.

(iv) *Rules for the guidance of Forest officers in compounding forest offences.*—The rules are reported to have worked satisfactorily in all the districts.

(v) *Rules framed under the Forest Act for private forests.*—The Jeypore, Vizianagram and Salur rules are reported to have worked as well as the rules permit; but the amendment of the Jeypore rules are now under consideration; no complaints were received from the villagers residing in villages near the reserved forests. In Madgole, the demarcation of 87 square miles notified under section 29 was completed. The rules were in one or two cases infringed; but the Government Agent took action on the spot and it is hoped that this will prevent any further breach. But the rules pertaining to this agency cover only a portion of the ground which is an extremely important factor in the hot weather water-supply of the *Gōdāvari* district, being the highlands from which almost the whole of the Jeypore territory (some 13,000 square miles) derives its water. This important question is now under consideration.

(*b*) SUPPLY OF FOREST PRODUCE TO MEET THE WANTS OF THE PEOPLE.

54. (i) *Development of the coupe and depot system.*—The permit is only used for grazing and minor produce in all the districts. A great advance has been made in the introduction of the contract system. In *Ganjām*, timber, fuel, and bamboo coupes were sold standing to contractors. In *Vizagapatam*, coupes in convenient localities for the supply of fuel, small timber and bamboos were worked during the year. The permit system was in force in the unreserved areas and, as regards the reserved forests, in respect of bamboos under the Dharakonda, Sanivaram working plan and in certain other localities where coupes could not be leased. Everywhere, however, the removals are localised and supervised, coupes being roughly marked off. In *Gōdāvari Upper* the inhabitants of the Bhadrāchalam taluk are allowed the privilege of cutting and removing classified and unclassified timber from unreserves free of cost for domestic and agricultural purposes. The inhabitants of the Nugur taluk are allowed no special concession; but may remove unclassified species of trees only to serve their agricultural and domestic requirements. There was no depot working and no need for it in the division. In *Gōdāvari Lower* permits are used for removals from Rampa and certain unreserves under the control of the Forest Department. There were no sale depots in the division. Eighteen fuel, three bamboo and three dead wood coupes were sold standing to contractors during the year. The working of the mangrove area of the Kandukuppa reserve for supply fuel to the fisher folk at fixed rates has been strictly carried out. In *Kistna*, all the sale depots were abolished, and coupes sold standing to contractors who opened depots in all the important towns. The rates charged for fuel were not high. In *Kurnool East*, the demand for timber and agricultural implements was generally met from the 100 miles of Chenchu Gudem, etc. lines which were cut during the year; nearly 2,150 sets of spokes and felloes were made out of dead teak and Yegisi trees in the Gudem range. Some agricultural implements were also made by the Chentsus of Buragundalapenta, Dornal range. In this (*Kurnool East*) Division for the first time the Chentsus have begun to take up line cutting work (and also bridle-path work) *on contract*, a big stride in their civilization. Fuel was offered for sale on the fire lines at the rate As. 4 a cart-load and 3 pies a head-load; but only 62 cart-loads were actually purchased by the public and the rest had to be burnt before the commencement of the fire season. Three bamboo coupes and one fuel coupe were leased out to contractors during the year, and a palmyra coupe of one thousand mature trees were also leased out for the first time; besides this, palmyra trees were also sold from the reserves on payment of the prescribed seigniorage of Rs. 2-8-0 per tree. In *Kurnool South*, as in last year the sale of spokes, felloes, ordinary timber, and fuel collected by departmental agency in depots was continued; but work by departmental agency was reduced in the year and four depots were closed; while at the same time the contract system was proportionately expanded. Here again there has been a stride; hitherto it has *cost* the department a good deal to cut fire lines, etc.; this year these lines were sold to purchasers, and from Rs. 40 to 60 per mile *realized* in scrub areas, up to about Rs. 250 per mile in timber areas, for the right of felling and removing the material from these lines. In *Kurnool West*, timber and fuel were sold in coupes in the Nallamalai ranges; while bamboos were leased out in blocks. In the Yerramalais three fuel coupes were sold standing to contractors. The contract for the supply of fuel from the Musalimadugu coupe to Kurnool town and small timber from the Bairluti coupe entered into with Pallam Venkatappa was cancelled. He was a contractor who had done the boating of fuel for these coupes to Kurnool for some

years, and afterwards undertook the whole purchase of the coupes. It was most regrettable that he should have now failed so badly in his contracts. The monthly auctions of timber in the forest coupes have become popular; but the quality of the timber was inferior and the timber already purchased was not removed by the purchasers promptly from the coupes. Hence it is to be concluded that local demand is not strong. The fault seems to lie in the extensive coppice with standard coupes, which from various points of view are not altogether satisfactory, and a rectification is now under consideration.

55. *Free removal of grass.*—Free removal of grass was permitted in *Vizagapatam*, *Gōdāvari Lower*, *Kistna* and three *Kurnools*. The concession was freely taken advantage of by the ryots and was not abused.

56. *Hill tribes.*—In *Ganjām*, the help given by the Khonds facilitated the clearing and burning of fire lines. The successful results of fire protection this year are greatly due to the active co-operation of the Khonds. In return for their services they were granted the usual concessions, namely timber for ploughs, bamboos and thatching grass for repairing their houses, minor forest produce and dry fuel. In *Vizagapatam*, the hillmen are similarly given concessions for their co-operation with the department. A few cases were reported in which it was stated that certain villages failed to render assistance in extinguishing fires that occurred in the Dharakhonda reserve. The matter was enquired into by the District Forest officer but it was found that the hillmen were not entirely to blame. On the whole the hillmen have rendered very fair assistance to the department. In *Gōdāvari Upper*, the Koyas and Reddis did good work during the year in clearing fire lines and in general protection of forests under promise that they would be duly rewarded. The District Forest officer hopes to distribute personally rewards and payments shortly. In *Gōdāvari Lower*, the co-operation of the Koya and Reddi population in the Polavaram and Yellavaram divisions was enlisted in the matter of fire protection as well as the general protection of the forests. Their services were also utilised in the construction of roads and katcha buildings. They all evinced considerable interest in the matter of prevention and putting out fires as they were amply rewarded and allowed several concessions in return for their services. The concessions granted to the Ankanagudem Koyas was suspended for one year, as they failed to render assistance in putting out a fire in the Beddadavole reserve. In *Kurnool East*, the conduct of the Chentsus during the year was on the whole satisfactory. They rendered much assistance in putting out fires and, as a reward, the Board sanctioned them free distribution of clothes worth Rs. 533–15–6. The rewards were distributed in proportion to the area of the forests successfully fire-protected. Thus if a gudem protected 20 square miles out of a total of 40, each man, woman and child in the gudem was allowed a set of clothes only partly free, and As. 8 in each rupee were recovered by work done. Their services were also utilised for the collection of minor forest produce and in the cutting of the boundary lines of the Chentsu gudems. Up till last year the Chentsus were employed only on plantation works; but during this year they were also given several other works like line-cutting, construction of bridle-paths, banding up of vagus, fire protection, etc. Two new gudems, Chintalamudipi and Chilakacherla, were taken in hand; these had begun thieving in the adjacent villages, but have now taken to regular forest work. The system of collection of ippa flowers for free distribution to them is much liked by them. A school for the education of the Chentsu children has been started at Garapenta and steps are being taken by the Taluk Board for the construction and opening of similar schools at Chilakacherla and other Chentsu centres. However the question as to whether or not schools should be started for Chentsus was settled recently by the Forest Commissioner, after a conference on the subject in the district. In *Kurnool South*, the Chentsus are very few in number. At Ahobilam they were employed in plantation works in the early part of the year and afterwards on weeding operations in the Raghupathimantapam coupe and on fire-protection works. Almost all the able-bodied Chentsus at Baireni and Mahanandi were employed as fire-patrols, while other works of bamboo weeding, sowing of teak and sandal and raising of similar seedlings in bamboo tubes on a small scale were started at the close of the year as an experiment. In *Kurnool West*, the Chentsus were employed on the plantation works, collection of minor produce and on fire-protection operations. A reward of Rs. 350 was paid to the Chentsus of Sudem, Pangidi and Rudracode for protecting the forests

from fire. In the Atmakur range the concession of the collection of Ippa flowers under departmental supervision and of distilling arrack therefrom was not allowed to the Chentsus as it was abused by their continuing to fire the forest. This prohibition was a great error of judgment; the gudems got out of hand during the year owing to want of proper sympathy and control on the part of the officer in charge, a most regrettable throw back in the scheme. In the Velgode and Nandyal ranges it was not availed—in the former, because the forests were burnt prior to the flowering season of Ippa, and in the latter, because the yield was very scanty. A school for Chentsu boys and girls was opened by the Local Fund department at Honkaram in the latter part of the year.

57. *Cultivation in reserved forests.*—No cultivation was allowed in reserved forests in *Gōdāvari Upper* and *Lower*, *Kistna* and *Kurnool South*. In *Ganjām*, a tenant at will lease covering an area of 60 acres in the Chendragiri reserve was granted to six Khond families on condition that they should live and cultivate the land in the forest and that they should help the Forest Department in the matter of fire and general protection; but one of the heads of the families having been recently killed by the local tiger, they have relinquished the land and have gone elsewhere. Probably they will return when the tiger in question has been killed. Podu cultivation by Pondakhol Khonds inside the reserve has become a thing of the past. In *Vizagapatam*, the lease of 55 acres in the Chintapalli reserve was renewed during the year. In *Kurnool East*, an extent of 40 acres 25 cents is under cultivation by the Chentsus free of assessment. An area of 111 acres, 47 cents in the Markapur reserve within the limits of the Rachakonda range was assigned in previous years to the Chentsus of Garapenta and Chennapalempenta for dry cultivation on an annual assessment of two annas per acre, on the condition that they render all possible assistance in putting out fires in the neighbouring forests. Twenty-five acres of land were given during the current year to the Chentsus of Murikemalapenta free of charge. In *Kurnool West*, the lease of the two plots of land measuring 74 acres in the Gadithamadugu reserve to the Christians of Gadithamadugu village continued during the year on the temporary annual lease system.

58. *Mining and prospecting.*—In *Kurnool South*, the lease granted two years ago to Khan Bahadur Waljee Laljee Sait and Mr. E. P. Stranach for prospecting for diamonds in the Owk reserve was surrendered during the year. A lease for thirty years for mining for diamonds over the whole of the Ramavaram reserve has been granted to Mr. A. Ghose of Calcutta. In *Kurnool West*, a mining lease for thirty years for lead ores was granted to Mr. A. Ghose of the Indian Mineral Company, Dhone, and Mr. C. Charles Jamlon of Paris; another for thirty years for diamonds to Mr. A. Ghose, and a third to Messrs. Beardsell & Co., Madras, for a similar period for Borytes were also granted. Two prospecting licenses for diamonds, one in the Pattikonda taluk and the other in the Dhone taluk were granted to Mr. A. Ghose during the year.

59. *Realization of revenue from the usufruct of toddy-yielding trees on Government waste and poramboke lands.*—The chief revenue was realized in *Ganjām* (Rs. 1,770), *Vizagapatam* (Rs. 790), *Gōdāvari Lower* (Rs. 5,157), *Kistna* (Rs. 11,212), *Kurnool East* (Rs. 1,413), *Kurnool South* (Rs. 2,618) and *Kurnool West* (Rs. 15,720).

(*c*) Live and Dead Stock.

60. *Live stock*—(*a*) *Elephants.*—All the elephants in this circle except one in *Ganjām* were in good condition. Of the three elephants in *Ganjām*, one is a weakling and the District Forest Officer proposes to get the opinion of Mr. Ware (Civil Veterinary department) on the subject of her disposal. The second elephant for the *Gōdāvari Upper* has not been purchased.

(*b*) *Buffaloes and bullocks.*—The two buffaloes in Ganjām were disposed of during the year. In *Kurnool East* two buffaloes were purchased to supply water to the subordinates and the Chentsus of Chinnamantrala and Tummalabailu when there is scarcity of water during summer. In *Kurnool South*, out of 32 bulls one was killed by tiger and another fell sick and died of what is probably tuberculosis. Many of these are now to be disposed of from this division as the departmental cartage of timber and firewood is coming to an end. A few will be required at the plantation centres in *Kurnool West*, and a transfer is about to be made.

Inventory of valuable stock.—The stock registers were maintained and verified in all the districts.

Rain-gauges.—Rain-gauges were set up in all the districts and the readings were properly recorded—*vide* Appendix F.

(*d*) SUITS.

61. *Suits.*—In *Gōdāvari Lower*, appeal to the Privy Council in respect of the Coringa extension suit has been preferred. Civil appeal No. 2053 of 1912 has been decided against on the ground that driftwood rules published in the Forest Manual are *ultra vires*. Mandavalli Subba Rao, a contractor of 1906, launched a suit against Government for recovery of Rs. 800. It is posted for trial in October 1914. In *Kurnool West*, in the pauper suit instituted by contractor Azam Sahib for Rs. 5,444 last year, the District Judge gave a decree in favour of the contractor for Rs. 664-11-8 of which the greater part was counter awarded to Government in costs, etc. No appeal was preferred against the decree.

FOREST COMMITTEE'S REPORT.

62. *Classification of forests.*—In *Gōdāvari Lower*, grazing areas were separated from the other categories of forests and were thrown open to grazing. A tentative scheme to regulate grazing has been prepared and submitted for the Gokavaram and Peddapur ranges and is under preparation for the Rajahmundry and Polavaram ranges. In *Kistna*, all the reserves in the district were classified under classes II, III, IV, V and VI. Notifications under section 24 of the Forest Act for the disafforestation of all the casuarina plantations shown under class III except the Weld reserve were submitted and Government Order sanctioning their disafforestation has been received. Notifications for the disafforestation of all the reserves shown under class VI except for Malleswaram, Kanukollu and Allinagaram reserves were also submitted; but Government Order sanctioning their disafforestation has not yet been received. Out of the seven reserves shown under class V, five reserves (Gudimetla, Gandrayi and Balusupad of Bezwada range and Chintalapudi and Velagolapalli of Ellore range) were selected for, and handed over to, panchayats in June 1914 to be managed by them from 1st July 1914. The following shows the assessment of grazing revenue fixed for 1914-15 which has been approved by the Board:—

Name of reserve.	Area in acres.	Amount of grazing revenue fixed.
		RS.
(1) Gudimetla	697	200
(2) Gandrayi	730	500
(3) Balusupad	1,982	400
(4) Chintalapudi	1,100	255
(5) Velagalapalli	2,160	265

In no other district have panchayats been appointed.

63. *Improvement of water-supply and grazing facilities in Government grazing grounds.*—In *Gōdāvari Lower* estimates are in course of preparation to sink wells and to improve the existing tanks in such areas. The other Collectors have not reported on this point; but in *Kunool East* a large tank is under construction for the purpose.

64. *Opening small fuel coupes for rural supply wherever an effective demand exists or can be stimulated into existence.*—No Collector has reported on this point except *Gōdāvari Lower*, where no necessity has arisen as there is considerable extent of waste land outside the reserves. Reduction in the size of coupes in *Kurnool West* is under consideration. In *Kurnool East* and *South* the demand is met at present mostly from the material cut on fire lines, etc.

65. *Gang system.*—This system was introduced in *Vizagapatam*, *Gōdāvari Lower*, *Kistna*, and *Kurnool South*. In *Vizagapatam* it was introduced in the Golukonda, Palakonda and a portion of the Sarvasidhi range. It cannot be extended until the executive and protective staff is strengthened. In *Gōdāvari Lower* each range was given only one gang except Rajahmundry which had two. The system has not yet properly developed, the original trials showing weak points which require modification.

WALTAIR,
2nd September 1914.

A. W. LUSHINGTON,
Conservator of Forests, Northern Circle.

INDEX.

FOREST ADMINISTRATION REPORT,

MADRAS PRESIDENCY,

CENTRAL CIRCLE, 1913–1914.

Chapter.	Subject.	Paras.
	Introduction—	
	Summary of progress during the five years 1909–1910 to 1913–1914.	
I	Constitution of State forests—	
	1. Alteration in area	1
	2. Forest settlement	2
	3. Demarcation	3
	4. Forest surveys	4 & 5
II	Management of State forests—	
	1. Regulation of management—	
	(*a*) Preparation and control of working-plans	6 & 7
	(*b*) Annual plan of operations	8
	2. Communications and buildings—	9
	(*a*) Roads and bridges	10
	(*b*) Buildings	11
	(*c*) Miscellaneous...	12
	3. Protection of forests—	
	(*a*) General protection	13 to 15
	(*b*) Protection from fire	16
	(*c*) Protection from cattle	17
	(*d*) Protection against injuries from natural causes	18
	4. Sylviculture—	
	(*a*) Natural reproduction	19
	(*b*) Artificial reproduction	20
	(*c*) Operations for the improvement of the growing stock ...	21
	(*d*) Experiments on species	22
	5. Exploitation—	
	(*a*) System of management—	
	(i) Major forest produce (Sylvicultural systems) ...	23
	(ii) Minor forest produce	24 to 28
	(*b*) Agency of exploitation	29
	(i) Departmental agency	30
	(ii) By purchasers...	31
	(iii) Rights and privileges	32
	(iv) Free grants	33
	(*c*) Outturn and sources of forest produce	34
III	Financial results	35
IV	Administration	36 to 53
V	General	54 to 66
	Appendices A to E and Annual Forms Nos. 65 to 85.	

FOREST ADMINISTRATION REPORT OF THE CENTRAL CIRCLE

FOR THE

FOREST YEAR ENDING 30TH JUNE 1914.

SUMMARY OF PROGRESS DURING THE FIVE YEARS 1909–1910 TO 1913–1914.

INTRODUCTION.

The following is the summary of the progress made in the Forest Administration of the Central Circle during the quinquennium ending with the year 1913–1914.

The control of the department in the general administration continued to remain in charge of the Forest Commissioner of the Board of Revenue. The Commissioners who held charge during the period are given hereunder :—

		From	To
The Hon'ble	Mr. C. J. Weir ...	1st July 1909 ...	15th September 1909.
,, ,,	Mr. R. B. Clegg ...	16th September 1909.	2nd November 1909.
,, ,,	Mr. C. J. Weir ...	3rd November 1909.	10th February 1910.
,, ,,	Mr. W. O. Horne ...	11th February 1910.	26th March 1911.
,, ,,	Mr. J. Andrew ...	1st April 1911 ...	11th April 1911.
,, ,,	Mr. E. Scott ...	12th April 1911 ...	2nd May 1911.
,, ,,	Mr. R. C. C. Carr ...	3rd May 1911 ...	3rd November 1911.
,, ,,	Mr. W. O. Horne ...	4th November 1911.	29th September 1913.
,, ,,	Mr. R. C. C. Carr ...	30th September 1913.	The end of the period.

2. Until March 1911 the circle contained the following eleven forest divisions :—

(1) Guntūr.
(2) Nellore.
(3) North Cuddapah.
(4) South do.
(5) East do.
(6) Chingleput.
(7) North Arcot.
(8) South do.
(9) Trichinopoly *cum* Tanjore.
(10) North Salem.
(11) South do.

With effect from 1st April 1911 the new district of Chittoor was formed and this comprised the following taluks of the districts mentioned below :—

Madanapalle Vayalpad	of South Cuddapah.	Chittoor Palmaner Chandragiri	of North Arcot.

In October 1911 the Presidency was divided into four Conservator's Circles and with this division the Central Circle parted with North and South Arcot, North and South Salem and Trichinopoly *cum* Tanjore, and received from the old Northern Circle the districts of Bellary and Anantapur. The Circle now consists of the following eight Forest divisions :—

(1) Bellary.
(2) Anantapur.
(3) Guntūr.
(4) West Cuddapah (formerly called North Cuddapah).
(5) East Cuddapah.
(6) Nellore.
(7) Chingleput.
(8) Chittoor.

3. The circle was administered by the late Mr. C. E. Brasier from July 1909 to 23rd April 1910 and then by Messrs. T. P. Peake, H. B. Bryant, and P. M. Lushington and again by Mr. Bryant from 24th February 1913 to the end of the quinquennium.

4. The Timber Transit Rules for the important district of Cuddapah were completely revised and made applicable to all classes of timber including Red Sanders and sandalwood.

5. Rules for compounding forest offences were issued by Government for the guidance of Forest officers, and Collectors were instructed to warn the villagers (through the Divisional Officers) who graze their cattle in particular forests that they would be held responsible for illicit grazing or other offences on a large scale in those forests if they fail to prevent such offences or to report them immediately to the nearest Forest officer, by enforcing the entire or partial closure of the forests to grazing. The warning appears to have had very little effect up to date.

6. During 1912–13 two reports of great importance were dealt with by Government. The first was that of the Forest Committee appointed in G.O. No. 1677, Revenue, dated 5th June 1912, to deal with the more pressing problems of the administration so far as they affected the relations between the Department and the agricultural population. Orders on the recommendations of this committee were passed in G.O. No. 3020, Revenue, dated 13th October 1913. The Government hoped that the result of these orders will be the creation of more cordial relations between officers of the Department and the ryots, the establishment of more effective departmental control over the important forests, and at the same time the promotion of the interests for which the smaller reserves were constituted. The second report was the valuable note of the Inspector-General of Forests, Mr. F. Beadon Bryant, on Forest revenue and expenditure in Madras. His main conclusions were—

(1) That a low proportion of expenditure to revenue should not be aimed at.
(2) That economies should be effected under planting, sowing, and buildings and that the extension of plantations should be discouraged.
(3) That the policy of substituting contract working for departmental agency should be persisted in and that the staff should be re-organized.

These subjects are being dealt with separately. The re-organization and increase of the Forest staff is one that is most urgently called for, and this fact is fully realised by the present Forest Commissioner.

7. During the period under report the pay of the Provincial officers has been improved by the introduction of a scale of pay based on length of service in place of the system of promotion from grade to grade.

8. Proposals for the augmentation of both the services including the appointment of a Chief Conservator for the Madras Presidency have been under the consideration of the Board of Revenue and are now, it is believed, before Government. Proposals also for improving the pay and prospects of the executive and protective staffs are under consideration and this long needed reform will, it is to be hoped, not have to be deferred for much longer.

9. *Changes in area.*—The area under the control of the circle was 8,048 square miles at the beginning and 5,861 square miles at the end of the period, or 2,187 square miles less. The decrease is due chiefly to the re-arrangement of districts as explained above when a fourth circle was formed in the Presidency.

10. *Abandonment of small reserves—Handing over petty and unprofitable reserves to the Revenue Department or village panchayats.*—Petty and unprofitable reserves adjoining villages which while useful for grazing, contain tree growth which it is necessary to preserve for future supply are being disafforested and handed over to the Revenue Department. All casuarina plantations are being sold together with the land and further planting has been stopped. The panchayat system of management was started. Four were actually formed in Chingleput and three in Anantapur during the last year of the quinquennium. This is in accordance with the Government Order on the Forest Committee's recommendation referred to in paragraph 6 *supra*.

11. *Forest settlement.*—The work of Forest Settlement was practically complete in the Circle except in the case of a few small extensions and additions which formerly formed enclosures within the reserve. Owing, however, to corrections of area, disafforestation, etc., the area finally settled at the close of 1913-14 amounted to 5,788 square miles as compared with 5,264 square miles at the end of 1908-09.

12. *Demarcation.*—The total length of boundaries artificially demarcated at the close of 1908-09 was 12,223 miles as compared with 11,770 miles at the end of the quniquennium. The work done under this head was found to be perfunctory and instructions were issued to all District Forest Officers in the circle to take up some of the reserves of their respective districts each year so that after a period of years all the reserve boundaries will be placed and maintained in a high state of efficiency. These instructions have been approved by the Board and satisfactory progress has been made in all districts during the past year or so.

13. *Surveys.*—An important change was effected by the Survey of India under which operations have to be carried out by the topographical party in the course of their ordinary programme and the general scale of forest surveys was also reduced from 4 " to 2" to a mile. Under this changed system the cost of surveys on the 2" scale is borne by the Survey of India but when surveys on larger scales are required the cost is debited to the Forest Department. With reference to Resolution No. XII passed by the Board of Forestry at its meetings in March 1913 lists of valuable forest areas where comparatively intense working is required and which require to be surveyed on the 4" scale, have been prepared and submitted. The total forest areas aggregating 2,821 square miles were surveyed by the Survey of India Party previous to 1909 and no further work was done in the Circle during the past quinquennium.

14. *Working-plans.*—Up to the end of 1908-09 working-plans were compiled for 1,564 square miles and during the quinquennium for 1,792 square miles, after deducting the areas for which sanctioned working-plans were cancelled in Bellary, and East and West Cuddapah.

As satisfactory progress as possible under existing circumstances was made in most of the districts but the work in this direction had to be deferred pending orders on the Forest Committee's report which have since been received and steps are being taken to classify the reserves before further action can be taken in the matter and in fact some of the sanctioned working-plans had to be withdrawn for preparation of fresh ones. There is already a proposal to appoint a special Working-plans Officer for each circle but on account of paucity of officers it has not been fully given effect to. A proposal to have a special working-plans branch is now under consideration of the Board and Government.

15. *Communications and Buildings.*—The average annual expenditure on communications, buildings and other works, amounted to Rs. 65,175 during the period under review as against Rs. 27,025 during the previous five years. The great increase shows that considerable attention has been paid to opening up the forests and to providing the staff with quarters and rest-houses.

16. *Forest offences.*—The average annual number during the quinquennium under review was 8,656 as against 6,298 during the previous five years.

17. *Fire protection.*—The average area under special fire protection amounted to 1,716 square miles the average of failure being 9·2 per cent. In the previous period the average area under protection was 1,516 square miles while failures amounted to 7·3 per cent. The increase in the area as compared with the previous five years ending 1908–09 was chiefly due to additional areas brought under protection in Bellary and Cuddapah.

18. *Protection from cattle.*—The regulation of grazing in forest areas is a question of the utmost importance but although much attention has been given to the subject in recent years, little real progress has as yet actually been made, towards its satisfactory solution. There is a distinct glimmer of hope however that before another quinquennium has passed away some really substantial progress may be made. The recommendations of the Forest Committee of 1912 as accepted by Government will, if worked in the correct spirit, form at least a basis for improvement in this important matter, and taken in conjunction with the Deputy Director of Agriculture Mr. Sampson's report on the cattle survey of the Presidency it affords a good deal for reflection and both reports contain most eminently sound advice. The average area annually open to cattle other than browsers decreased by 801 square miles or 13 per cent. and that open to browsers increased by 4 square miles or 1·2 per cent. the average area open each year being 5,128 square miles and 340 square miles respectively. During the same period the average forest area amounted to 5,933 square miles or 304 square miles (5·1 per cent.) less than during the previous quinquennium. The average number of all animals admitted to graze decreased from 1,773,707 in the previous quinquennium to 1,586,837 in the period under review.

19. *Abandonment of cultural operations in the attempts to re-stock hard and unfertile soil artificially.*—Steps have been taken to curtail as much as possible all expenditure on cultural operations and to dispose of all casuarina plantations as they become mature together with the lands. The further planting of this tree being entirely left to private enterprise as it is now thoroughly well understood and established.

20. The following statement shows the average annual outturn of the forests for the two periods:—

——	Timber and fuel.	Bamboos.	Minor produce value.
	C. FT.	NO.	RS.
1904-05 to 1908-09	4,905,967	1,517,074	7,87,550
1909-10 to 1913-14	6,837,788	4,056,803	7,43,910

There was an increase of 39 per cent. on the average annual outturn of timber and fuel and of 167 per cent. in the average number of bamboos extracted,under minor produce, a decrease of 5 per cent. in the average annual value.

21. *Transfer of exploitation of the forests from departmental to contract agency.*—This policy has, as recommended by the Inspector-General of Forests in his valuable memorandum, been steadily persevered with and practically little or no departmental fellings are now undertaken in the Circle. The policy has been completely justified and every year hence is certain to increase the total outturn. It has set free a large part of the establishment and enabled the latter to attend to their own more legitimate Forest duties instead of being tied up checking depot stocks and accounts and bringing to light dryage and other deficiencies which once gone could never be recovered. The change is one decidedly in the right direction and it came none too soon.

22. *Financial results.*—The average annual financial results for the last two periods were as follows:—

Year.	Revenue.	Expenditure.	Surplus.
	RS.	RS.	RS.
Quinquennial ending 1908-09 ..	10,15,784	5,87,378	4,28,406
,, 1913-14 ..	11,82,412	7,98,212	3,84,200

The gross revenue increased by 16 per cent., the expenditure by 36 per cent. and the surplus decreased by 10 per cent. The increased expenditure which resulted in the decrease under surplus was chiefly due to large expenditure incurred in Bellary and Anantapur under "Buildings", "Cultural Operations" and "Fire Tracing Operations", when those districts were attached to the Northern Circle.

23. *Forest education.*—The Madras Forest College was established at Coimbatore and 12 men from this Circle were deputed for the first time in 1912. Of these, two failed to join, two were removed from the college for incapacity to follow the course and a third on account of illness; thus leaving seven men, of whom one obtained Honour's Certificate, five obtained Higher Standard Certificates, and one, Lower Standard Certificate. In 1913, four men were deputed and one of them was sent down as he was found to be wanting in capacity, industry and habits of discipline even after repeated warnings.

24. *Vernacular Training School.*—A fourth Vernacular Training School in Telugu was sanctioned for the Presidency in this Circle for the training of foresters and forest guards. The school was held in East Cuddapah district in 1913, and in 1914 in Anantapur.

CHAPTER I.—CONSTITUTION OF STATE FORESTS.

1. Alteration in Area.

Reserved forests.—One thousand and twenty-three acres were added by correct computation of areas, 835 acres by transfer from Reserved Lands and 5,762 acres were deducted by disafforestation and revision of areas. At the close of the year the net area of Reserved Forests of the Circle stood at 5,788 square miles.

Reserved lands.—One hundred and twelve acres of small areas consisting of enclosures and additions to existing reserves were newly constituted. Eight hundred and thirty-five acres were transferred to Reserved Forests and 382 acres were excluded owing to the cancellation of initial notifications under section 4. There remained at the close of the year 73 square miles including leased forests.

2. Forest Settlement.

2. Eight blocks (12 square miles) remained to be constituted at the commencement of the year, to which three blocks (all less than a square mile) were added during the year, making 11 blocks in all. Of these eleven, 2 blocks (1 square mile) were transferred to Reserved Forests and the reservation of 2 blocks (1 square mile) was cancelled, leaving 7 blocks (10 square miles). Of these seven, the settlement of one block was completed and notification under section 16 was issued but reservation is to take effect from 1st July 1914. Settlement was completed but not reported to Board for 3 blocks (10 square miles) during the year, and Settlement is proceeding for 3 blocks, 1 in *Anantapur*, 1 in *East Cuddapah*, and 1 in *Chittoor* and 2 enclosures in *Chingleput*, all less than a square mile.

3. Demarcation.

3. The matter of permanent demarcation of Reserved Forests has received attention during the year and good progress was made in all the districts, several Reserves having been demarcated with solid stone pillars surrounded by well packed cairns of stones, the outer edge of the boundary being shown by a lockspit or a two-foot wide stone alignment between the cairns.

4. Forest Surveys.

(*a*) *By Survey of India.*

4. No work was undertaken by the Survey of India in this circle during the year. The Index Map of the Madras Presidency showing the limits of controlling and executive charges is reported by the Forest Map Officer, Dehra Dun, to be in the Press.

(*b*) *By Departmental Surveys.*

5. The departmental surveyors were chiefly employed in verifying boundaries of reserves and surveying disputed localities and coupes to be leased out.

CHAPTER II.—MANAGEMENT OF STATE FORESTS.

1. Regulation of Management.

(*a*) *Preparation and Control of Working Plans.*

6. *Preparation.*—The following Working Plans have been prepared and sanctioned at the close of year :—

A tentative working plan for Kavali Range in *Nellore* (Board's Proceedings Forest No. 122, dated 23rd June 1914).

A tentative working plan for 27 square miles of Seshachellam Hill Timber Forests, Kodur Range, *East Cuddapah* (Board's Proceedings Forest No. 127, dated 2nd July 1914).

A tentative working plan for Thunakonda Reserve, Kodur Range, *East Cuddapah* (Board's Proceedings Forest No. 143, dated 27th July 1914).

The working plan received for Nellore Range after the close of last year has been completely revised and a tentative plan on the lines of that sanctioned for the neighbouring range of Kavali has been brought into force and will be shortly submitted to the Board for sanction.

Both this plan and that for Kavali Range were drawn up, on lines previously discussed and approved at a meeting at Nellore at which the Commissioner of Forests, the Collector, the Conservator and District Forest Officer were present.

7. *Control.*—The following Working Plans have been cancelled by the Board during the year as their provisions were found to be quite unsuitable :—

In *Bellary*, the working plans of Adoni, Alur, Bellary and Harpanahalli ranges sanctioned in the following Board's Proceedings :—

Forest	No.	10,	dated	12th January 1905.
,,	,,	173	,,	26th August 1907.
,,	,,	109	,,	20th April 1911.

All these provided for large cultural operations in degraded reserves and these operations have been ordered to be put a stop to.

In *Cuddapah district*, the Seshachellam Timber Working Plan sanctioned in Board's Proceedings Forest No. 163, dated 11th September 1909, and Board's Proceedings Forest No. 41, dated 24th February 1913, was cancelled as the prescribed selection system had proved in practice to be unworkable over extensive areas.

For the same reason the provisions of existing plans for the Lankamalais, Palakondas and Nallamalais also in Cuddapah district were not adhered to, nor were those of the Mamandur Working Plan in *Chittoor*. Generally speaking most of the existing Working Plans need revision as their provisions have by no means been fully carried out, and it seems of little use to have Working Plans on paper the provisions of which cannot be applied in practice.

The inadequate Controlling Staff of the department will no doubt continue to do its best to prepare Working Plans ; but until it is so increased as to enable the department to have a special and sufficient Working Plans Branch it is unlikely that much satisfactory progress will be made in this extremely important line of good Forest Administration. The Board is fully aware of the difficulties under which the Department labours in this respect and has, it is understood, already addressed Government on the subject.

(*b*) *Annual Plan of Operations.*

8. The sanctioned plan was generally adhered to ; the chief deviations were—

In *Bellary*, the widening of a bridle path from Copper Mountains Bungalow to Bellegal Thanda, two inspection paths in Yerur and Molagavalli reserves and the two inspection bungalows at Tsudi and Kanavihalli and 4 wells were not undertaken.

In *Guntur*, some of the proposed roads and building works were given up for various reasons.

In *West Cuddapah*, Timber selection system was put a stop to and an intensive Improvement system of fellings over small areas was adopted in its stead. Minor produce was leased out talukwar instead of blockwar and the lease of Tooki (*Diospyros Ebenum*) leaves was stopped and certain road and building works proposed were not carried out.

In *East Cuddapah*, the construction of Umithala-Budithapenta road, the Range office at Porumamilla and rest houses at Gurutlabhavi, Tankudu and Joti were not taken up for want of funds.

In *Nellore*, the construction of subordinates' quarters at Amancherla and the Range Camp shed at Marupur were given up.

In *Chingleput*, bridle-paths in Kambakkam and Nagalapuram Reserved Forests and the extension of Allikuli-Ramanjeri road were not taken up.

In Chittoor, the construction of certain roads and buildings was postponed to provide funds for incomplete and more urgent works.

In general the proposals for roads and buildings in each district were subjected to a very close scrutiny before they were approved and sanctioned in accordance with Government Orders on the subject and in conformity with the advice tendered by the previous Inspector-General of Forests Mr. F. Beadon Bryant.

2. Communications and Buildings.

9. The outlay on commnnications and buildings is compared below :—

	1912-13.	1913-14.
	Rs.	Rs.
Roads and bridges	14,271	11,764
Buildings	51,816	37,122
Other works	3,897	3,947

There was a decrease under all the heads except "other works" and this was due to withholding of certain works which were not considered urgent and pending the preparation of a scheme of roads and other means of facilitating the transport of forest produce and of buildings for a term of five years as called for by the Board. This is now being prepared.

The important works were—

(*a*) *Roads and Bridges.*

10. In *Anantapur*, Bukkapatnam-Vanavole road is in progress ; cart-tracks connecting Palayam and Siddapuram bungalows to the main road were completed.

In *West Cuddapah*, improvement to Mudampad—Dinnela cart-track was carried out besides repairs to existing roads and bridle-paths.

In *East Cuddapah*, roads from Ulandramani Tanna to Thummalabylu and on to Vathalur were completed.

In *Chittoor*, $1\frac{1}{4}$ mile of Nellipatla-Rangampet road and $2\frac{1}{2}$ miles of first section of Mamandur-Chatram Ghat road were completed in addition to repairs to old roads and bridle-paths.

Tramways.—In the Sriharikota and coast ranges of the Nellore district, 7,602 tons and 6,308 tons of fuel were trammed against 8,749 and 5,257 tons respectively in the previous year.

(*b*) *Buildings.*

11. In *Anantapur*, Marutla and Siddapuram bungalows were completed and several other bungalows were substantially repaired. A combined range office and quarters at Madakasira and a rest house at Kalasamudram are nearing completion.

In *Guntur*, the construction of Venkatayapalem bungalow was continued, but the work remains still incomplete and a further supplemental estimate is in course of preparation by the District Forest Officer. The extraordinary delay in completing this rest house which was sanctioned several years ago is now under enquiry.

In *West Cuddapah*, the construction of Veeraballi rest house with out-houses and out-houses to other rest houses and subordinates quarters' and tanna shed near the High School at Cuddapah were undertaken.

In *East Cuddapah*, range offices at Kodur and Rajampet rest house at Kondur were completed.

In *Nellore*, Range officer's quarters at Kothachenu in Sriharikota range and Kanigiri subordinates' quarters were constructed.

In *Chittoor*, Palmaner rest house was improved, subordinates' quarters at Mamandur were completed besides the construction of out-houses to rest houses and extensive repairs to Horsleykonda bungalow which badly needed them and other buildings were carried out.

The progress made in construction of roads and buildings may be considered satisfactory on the whole. More roads for the purpose of transporting major Forest produce to the markets from forests which will, if such roads are made, become immediately workable are needed specially in *East* and *West Cuddapah* and in *Chittoor* districts and it is hoped that these will be shortly undertaken. In *East Cuddapah* very good progress was made in this respect during the year but there is much still to be done. It must be pointed out that what is really required is not expensive ghaut or metalled roads which cost a heavy price, but inexpensive though very useful cart-tracks along which it is possible to transport forest produce in the ordinary country carts.

Any serious curtailment of expenditure under these important heads for several years to come would not denote a sound forest policy in the Circle, at the same time it is very necessary to carefully scrutinize all proposals and examine the real necessity for each before passing it.

(*c*) *Miscellaneous.*

12. In *Bellary*, *Anantapur*, *Guntur* and *Chittoor*, new wells were sunk and old wells deepened and repaired.

Stone walls were constructed around reserves in *Anantapur* and timber improvement felling coupes in *East Cuddapah*. Compound walls were built to range quarters in *Bellary* and *West Cuddapah* and wire fencing was put up round Gonupalle rest house in Nellore. The remaining half of Guindy Park Reserve in Chingleput was fenced with stone pillars placed at intervals of 20 feet with 5 strands of galvanized wire and this completed the fencing of the whole Park.

3. Protection of Forests.

(*a*) *General Protection.*

13. The following statement shows the number and classification of forest offences compared with the previous year :—

Class.	Injury to forests by fire.		Unauthorized felling or appropriation of wood and minor forest produce.		Grazing without permission or in tracts in which grazing is prohibited.		Other offences.		Total.	
	1912-13.	1913-14.	1912-13.	1913-14.	1912-13.	1913-14.	1912-13.	1913-14.	1912-13.	1913-14.
1. Cases taken into court.	11	10	1,071	1,228	766	867	82	111	1,930	2,216
2. Cases compounded	5	4	4,314	4,313	2,834	2,993	189	353	7,342	7,663
3. Cases undetected ..	267	197	176	188	122	247	1	1	566	633
Total ..	283	211	5,561	5,729	3,722	4,107	272	465	9,838	10,512

There has been decrease under "Fires" chiefly in *Bellary* and *Anantapur*. Under "unauthorised felling" the increase is attributed to larger number of offences in unreserved lands. The increase under grazing occurred chiefly in *Bellary* and *Nellore* and is stated to be the result of better supervision and a very large number of cases of grazing detected in fenced areas respectively.

Out of 2,104 cases taken into Court 1,915 cases ended in conviction and 189 cases were acquitted against 1,769 and 300 respectively of previous year.

The percentage of failure is 8·98 against 14·50 of last year and 15·37 of the previous year.

14. *Cases compounded.*—Six thousand eight hundred and seventy-six cases were compounded for Rs. 67,758. The punishments awarded by the Magistrates are reported to be adequate on the whole. Rewards were sparingly granted in all the districts except *Bellary* and *Chingleput*.

15. *Rules for the guidance of Forest officers in compounding offences.*—The following is a prēcis of the district reports :—

In Bellary and West Cuddapah.—The rules have generally been followed and in no case the maximum limit exceeded.

In Anantapur.—The rules have worked satisfactorily but no real improvement in conservancy can be expected till the underpaid subordinates are replaced by a properly-organised permanent staff on pay commensurate with their temptations, opportunities and responsibilities. No action has been taken to penalize any villages on account of persistent illegal grazing.

In Guntūr.—The working of the rules has been satisfactory.

In East Cuddapah and Nellore.—The rules were observed.

In Chingleput.—The rules had been observed but they had no particular effect during the year.

In Chittoor.—The rules were observed until receipt of Government Order on Forest Committee's report which restricts maximum fee to Rs. 100 in a case.

From the above it will be observed that the rules have been followed in every district.

(*b*) *Protection from Fire.*

16. The system of fire protection continued to be the same as in previous years.

Special protection.—The area attempted to be protected during the year was 2,091 square miles against 1,908 square miles in the previous year and the area burnt was 150 square miles against 121 square miles of the previous year.

The area successfully protected was 1,941 square miles against 1,787 square miles in the previous year. The percentage of area protected fell from 93·6 to 92·8 during the year.

The cost per square mile of successfully protected area fell from Rs. 14–7–5 to Rs. 14–3–3 and the decrease is small and calls for no explanation.

In Bellary.—There were very large fires chiefly in Sandur and Harpanahalli ranges and the area burnt was about half the area attempted to be protected, the reasons assigned being heavy growth of grass, absence of more interior fire lines and long continued hot weather and misconduct of subordinates entrusted with the work. The matter of fire protection in *Bellary* district is now under much consideration and it is likely that a change of system will be considered necessary.

In Guntūr.—Owing to the very heavy grazing, and to the absence of inflammable growth, the danger from fire is not great. Only one fire covering an area of 250 acres occurred in specially protected areas.

In West Cuddapah.—The increase in the proportion of failure is attributed to the want of timely rains and of proper supervision by executive officers owing to changes.

In East Cuddapah.—The Nallamalais of the Porumamilla range was brought under special protection and the fire line in Lankamalais of the Sidhout range has been widened to 100 feet.

In Nellore.—The width of the outer and inner boundaries of fire lines was increased in order to prevent fires crossing.

In Chittoor.—There were serious fires in two reserves believed to have been due to incendiarism. Though there were numerous fires they were not extensive and the adjoining villagers are reported to have assisted in putting them out.

The origin of fires is given in Appendix D.

(*c*) *Protection from Cattle.*

17. The area closed and open to grazing is given in statement No. 73 which shows that 5,596 square miles were closed to goats.

An analysis of the cattle impounded during the year with the average of three years is given in Appendix E.

The increase in *West Cuddapah* is reported to be due to better protection attempted during the year and that in *Chittoor* to the restriction of the area open to grazing.

(d) Protection against injuries from natural causes.

18. *Lantana.*—The encroachment of lantana in Ramandrug in *Bellary* district and Horsleykonda in *Chittoor* district continued to receive attention, but the complete eradication of this pest is a very difficult matter.

In Moka plantation several young casuarina and sissoo poles are reported to be dying on account of an attack of a root fungus.

In *Guntur*, it is reported there was no further damage to casuarina plants by the erosion of the sea in Sooryalanka plantation. The casuarina plants that died owing to drought were replaced.

In *West Cuddapah*, deer are reported to have caused damage to coppice shoots in the fuel coupes of all the ranges. In the Proddatur range defoliators of various species attacked the leaves of Red Sanders, Zizyphus xylopyra, Yelama (Anogeissus latifolia) and Billu (Chloroxylon Swietenia) and disappeared after the heavy showers. The trees are all putting on fresh leaves.

4. SYLVICULTURE.

(a) Natural Reproduction.

19. In *Bellary*, seedling reproduction of Hardwickia binata, Albizzia Lebbek and Pterocarpus santalinus and of Bassia longifolia Ixora parviflora, Diospyrus Chloroxylon, Cassia Fistula, Dolichandrone crispa, Acacia Sundra, Chloroxylon Swietenia was fair in some of the reserves. Santalum album is decidedly spreading in Ramandrug block of Sandur range. The coppice growth in felled coupes was satisfactory.

In *Anantapur*, natural reproduction is reported to be good wherever there was shade. The reproduction of Hardwickia binata and Anogeissus latifolia was good in open grassy areas and Melia indica (Neem) wherever protected by thorny shrubs against grazing.

In *Guntur*, owing to heavy grazing regeneration was bad but coppice of babul was good in the Babul West working circle and fair in the coupes felled for fuel. Reproduction of mada (Avicennia officinalis) by seed in the Mangrove swamps was also good.

In *West Cuddapah*, natural reproduction from seed and coppice of Red Sanders were good and in a timber improvement coupe, the coppice shoots are reported to have come up a foot high in fifteen days. A large number of Red Sanders seedlings in the Nallamalais which died during the hot weather are, it is stated, putting forth fresh shoots.

In *East Cuddapah*, reproduction of Red Sanders in places protected from fire and cattle was good and of sandalwood in Kodur and Uparapalle plantations and of Thamba (Shorea Tumbuggaia) in the Seshachallam plateau was very good. Regeneration by coppice shoots in all the felled areas especially of Red Sanders was excellent.

In *Nellore*, natural reproduction of different species by root suckers especially of Dalbergia latifolia was noticed in some places in the Veligondas. Reproduction from seed was very fair in the closed and Kancha areas, the most noticeable species Dodonæa viscosa, Cassia auriculata, Acacia Latronum and Sundra and Melia indica. Regeneration from coppice shoots was successful in all felled coupes.

In *Chingleput*, reproduction from coppice in all the closed coupes is said to be fair and natural seedlings of Red Sanders, Pterocarpus Marsupium, Shorea Tumbuggaia and other species are found on plateaus, slopes and valleys.

In *Chittoor*, natural reproduction from seed was not very satisfactory owing to continued drought and grazing. Reproduction by coppice was good in all felled coupes. Coppice shoots of Pterocarpus santalinus and Anogeissus on the Tirupati side are said to be remarkable. Natural reproduction of Red Sanders and sandalwood was good in all the reserves where these species existed and which were closed to cattle.

(b) Artificial Reproduction.

20. *Regular plantations.*—Bellary, in the Moka plantation, an area of 50 acres was planted with seedlings of Delbergia Sissoo, Albizzia Lebbek and cuttings of the former species. Casualties in the previous year's plantations were filled with cuttings of Sissoo and these are said to be thriving well. In *East Cuddapah*, the germination of sandal seed sown in the area near Mogilipenta was very poor.

Cultural operations.—In *Bellary*, the operations undertaken on a limited scale in sowing Red Sanders and sandal seeds along streams in certain working circles and various other species in seed drills in furrows 10′ apart by the ryots along with field crops, the soil being prepared previously by heavy ploughing and levelling, have completely failed owing to want of timely and sufficient rains. Mound sowings were continued and sown with seeds of various species and the germinations are fair and promise to give good results with an average rainfall. In *Anantapur*, Sandal was dibbled experimentally in two places and the result was disappointing owing to the lateness of the rains. In *Guntūr*, nothing was done except sowing seeds of Albizzia Lebbek, amara and Pongamia glabra seeds by subordinates in the blanks in plots planted last year in Muthayapalem reserve; 70 per cent. of these germinated but only 5 per cent. survived the hot weather. In *Chingleput*, 2,695 acres in felled coupes and in poorly stocked areas are reported to have been ploughed and seeds of various species were either sown or dibbled in holes under bushes without cost to Government. The sowings made in the coupes in previous years are said to have failed. It is extremely doubtful whether either of these operations were really actually carried out. In *Chittoor*, seeds of Red Sanders dibbled in the Chittoor reserve on mounds was not successful on account of the drought while sandal dibbled in certain coupes of Palmaner was partially successful.

(*c*) *Operations for the improvement of the growing stock.*

21. *Improvement fellings.*—In *East Cuddapah*, three coupes were under felling and with the beginning of the official year two more, viz., Balapalle and Gadela were added. These areas are being worked under the Working Plan recently sanctioned in Board's Proceedings, Forest No. 127, dated 2nd July 1914, for part of the Seshachellam Red Sanders forests in Kodur range.

In *Nellore*, all casuarina is being removed from plot of 1908 in Kollurpad plantations.

Thinnings.—In *Nellore*, thinnings were made in the 1910 plot of Kollurpad plantation.

Creeper cutting is reported to have been carried out in almost all the districts of the Circle; and prickly-pear in the Guindy Park and Meyyur plantation of *Chingleput* was removed.

Fencing.—In *Bellary*, fencing was done in Adōni range and milk hedge (Euphorbia Tirucalli) was planted along the boundaries of three working Circles in Harpanahalli range.

In *Anantapur*, stone-walling closed compartments was continued.

In *Nellore*, fencing of old fuel coupes was done departmentally and of new coupes by contractors.

In *Chingleput*, all the coupes felled and under felling were fenced with thorny growth. The areas sown with seeds and those closed to grazing were also fenced.

Bunding of streams.—In *Bellary*, additional bunds were constructed and old ones repaired in Adōni range. In *Chittoor*, the bunding was continued in all the ranges at a small cost.

(*d*) *Experiments on Species.*

22. *Dalbergia Sissoo.*—Stout cuttings of these are successfully grown in the Moka plantation of *Bellary*. In *Nellore* they did not thrive well.

Sandal.—In *East Cuddapah*, the seeds dibbled have germinated fairly well.

Swietenia Mahogani.—In *East Cuddapah* and *Nellore* the plants are reported to be doing well. In *Chittoor* the existing plants in Whiteside's garden and *Chittoor* reserves are reported to be not promising.

Swietenia Macrophylla.—In *East Cuddapah* and *Nellore* the old plants are reported to be doing well.

Acacia auriculiformis.—Eleven plants in *West Cuddapah* are thriving. In *Nellore* they are thriving fairly well and seems well suited to the locality.

Eucalyptus Globulus.—In *West Cuddapah* the growth is reported to be not satisfactory. In *Chittoor* the trees in Palmaner plantation are reported to be thriving. It is unlikely that this tree will do well in either of these districts and no more will be put down.

Catalapa speciosa.—In *Nellore*, these species do not thrive well.

Divi Divi plants.—These are planted in *Nellore* and *Chittoor* districts and are reported to be thriving well.

5. Exploitation.

(a) *System of Management.*

(i) Major Forest Produce.

23. The various sylvicultural systems in force in each district are given in the following statement:—

—	Bellary.	Anantapur.	Guntūr.	West Cuddapah.	East Cuddapah.	Nellore.	Chingleput.	Chittoor.	Total.	Percentage of total area under each sylvicultural system.
	SQ. M.	SQ. M.	SQ. M.	SQ. M.	SQ. M.	SQ. M.	SQ. M.	SQ. M.	SQ. M.	
1. Method of clear felling by compartment.	22	..	..	..	..	..	..	..	22	7·2
2. Uniform method	..	..	..	..	..	..	..	..	..	..
3. Group method	..	..	..	..	..	..	..	..	..	..
4. Selection method	..	..	2	22	..	..	..	..	24	7·8
5. Simple coppice	9	..	1	..	..	..	..	..	10	3·3
		ACS.								
6. Coppice with standards ..	12	70½	7	1	3	5	4	2	250	81·4
7. Method of improvement fellings.	(a) 216	..	..	..	..	..	..	1	1	·3
Total ..	259	..	10	23	3	5	4	3	307	100·0

(a) Included in the forests for which working-plans have been prepared but not subjected to any definite system of working.

It will be seen from the above that Coppice with Standards is the principal method of working in this circle.

(ii) Minor Forest Produce.

(1) *Miscellaneous Produce.*

24. Minor produce was generally leased out in all the districts except in the Sriharikota range of *Nellore* district where for local reasons the produce was collected departmentally.

Permits were continued to be issued for stone, earth and road materials.

(2) *Extraction of Fodder.*

25. *In Bellary*, Mr. H. W. Howes cut and removed 250 tons of hay and the Military Grass Farm Department 1,567 tons during the year.

In *Guntūr*, the right to remove grass from closed areas was sold in auction.

In *West Cuddapah and Nellore*, the right to cut grass was leased out in some reserves.

(3) *Free Removal of Grass.*

26. *In Bellary*, free removal of grass was allowed from all the closed portions where the grass was unmarketable. The areas thrown open was 45,569 acres.

In *Anantapur*, as in previous years, free removal was allowed from all the reserves except those under cultural operations. The concession was withdrawn in the case of compartment III of Kothakota and Sankarakal reserves as the neighbouring villagers did not help in putting out fires. Seventy-nine tons and 680 lbs. of grass are reported to have been removed during the year by the Military Grass Farm, Bangalore, from two reserves.

In *West Cuddapah*, free removal of grass was permitted in most of the reserves and 4,000 cart-loads were removed. The concession was largely availed of by the ryots and there was no abuse of the concession.

In *East Cuddapah*, free removal was allowed from all reserves except those under hay operations and from the leased blocks of reserves. Eight thousand tons are reported to have been removed during the year.

In *Nellore*, free removal was permitted from March last in Rapur and Udayagiri ranges.

In *Chittoor*, free removal was allowed in head-loads from all reserves except in coupes closed after felling.

In *Guntūr and Chingleput*, the concession was not availed of.

(4) *Hay-making.*

27. The departmental operations were conducted in *Guntūr and East Cuddapah* districts. Detailed report on the operations has been submitted to Board in this office Nos. C. 558/14, dated 5th July 1914 and 4th August 1914. In *East Cuddapah* the operation has been successful and in *Guntūr* it was a failure and hence ordered to be abandoned. One hundred and eighty-one tons, 1,128 lb. were turned out during the year in *East Cuddapah* and 286 tons in *Guntūr*. Certain areas are being leased to the Military Grass Farms, Bangalore, on payment at Rs. 2 per ton of made-hay.

(5) *Grazing.*

28. The revenue realised during the year was Rs. 2,70,931 against Rs. 2,60,729 of last year.

The increase was in *Bellary*, *Guntūr*, *East Cuddapah*, *Chingleput*, *Chittoor* and *Anantapur* and decrease in other districts.

The decrease, is due to limitation of grazing in working plan areas, and the prohibition of goat browsing.

The increase in *Bellary* is due to opening of closed areas in Adoni and Alur ranges as per Board's Proceedings Forest No. 815 R., dated 18th September 1913, in Guntūr to larger areas thrown open to grazing, in *East Cuddapah* to the vigilance of subordinates and the patrolling of the students of the Vernacular Training School at the early part of the grazing season, in *Chingleput* to the removal of rules restricting limitation of cattle and in *Chittoor*, it is stated to be due to better protection. The special provision for the grazing of the "Done" and "Vaccine" calves of the King Institute, Guindy in the Chingleput district has since been withdrawn.

(6) *Improvement of water-supply and grazing facilities in Government grazing grounds (Board's Proceedings Forest No. 125, dated 29th June 1914).*

The orders having been received after the close of the year the information ordered to be embodied in the Annual Administration Report can only be entered in the next report. It is here sufficient to state that all reasonable and possible improvements to the water-supply for cattle, in areas open to grazing will be carried out as soon as possible, and grazing facilities which are of real interest to the grazing areas, to the cattle which graze therein, and to the ryots who own the cattle, will be considered and encouraged in every possible way, at the same time not overlooking the interests of the tree growth.

(*b*) *Agency of Exploitation.*

29. Departmental operations have been entirely abolished, except to a small extent in *Bellary*, *Guntūr* and *West Cuddapah.*

(i) Departmental Agency

30. *Timber*, *Fuel and Bamboos.*—The decrease is chiefly due to the transfer from departmental agency to exploitation by the contract system throughout the Circle.

Minor produce.—The difference is small and needs no explanation.

(ii) By Purchasers.

31. (*a*) *Timber.*—The increase is due to the increased sale of trees on darkhast lands by the Revenue Department.

(*b*) *Fuel.*—The increase is due to the further extension of the contract system.

(*c*) *Bamboos.*—The increase is due to the same cause.

Minor produce.—The decrease is chiefly in *Nellore* and is due to fall in the revenue on Amaroy produce.

(iii) Rights and Privileges.

32. In *East Cuddapah*—eight hundred cows and bulls were allowed to graze on free permits under the terms of the settlement of Settigunta reserve. In *Nellore*, an area of 1·22 acres in Marupur reserved forest was granted for cultivation to the ghat talaiyaris for assisting the police, and free grazing was allowed in the tope reserves for 5,251 cows.

As regards the concession of free removal of grass full details have been given in paragraph 26 *supra.*

(iv) FREE GRANTS.

33. The subjoined statement shows the particulars of free grants which were made chiefly for rebuilding houses burnt by fire. In *Nellore*, palmyra trees and leaves were as in last year, granted for the construction of huts for the Kavali and Kalichedu criminal settlements.

—	Timber.		Fuel.		Bamboos.		Grass and grazing.	Other minor produce.	Total value.
	Cubic feet.	Value.	Cubic feet.	Value.	Number.	Value.	Value.	Value.	
		Rs.		Rs		Rs.	Rs.	Rs.	Rs.
Right-holders	..	..	..	..	..	..	150	..	150
Free grantees	84,180	5,666	..	..	14,775	230	1,813	644	8,353
Total ..	84,180	5,666	..	..	14,775	230	1,963	644	8,503

(c) *Outturn and Source of Forest Produce.*

34. The following statement shows the total outturn as compared with the previous year. The variations have been already explained.

Agency of exploitation.	Timber in cubic feet including sandal-wood.		Fuel in cubic feet.		Bamboos in number.		Minor produce (including grass and grazing) gross value in rupees.	
	1912-13.	1913-14.	1912-13.	1913-14.	1912-13.	1913-14.	1912-13.	1913-14.
1	2	3	4	5	6	7	8	9
							Rs.	Rs.
By Government agency ..	67,011	20 567	1,417,886	100,896	88,338	9,120	18,036	18,941
By purchasers (including confiscation)	1,396,145	1,585,381	4,208,548	5,688,506	1,683,367	1,766,649	9,41,935	6,92,586
By right holders	..	..	..	..	..	..	151	150
By free grantees	58,117	84,180	20	..	24,950	14,775	1,836	2,457
Total ..	1,521,273	1,690,128	5,626,454	5,789,402	1,796,655	1,790,544	9,61,958	7,14,134

The policy of exploitation of the forests by the agency of purchasers is progressing very satisfactorily as is evidenced by the above figures.

The rates of grazing fees levied in the districts are embodied in Form No. 74. The number of animals for which permits were issued on payment was 1,595,654 against 1,542,799 of previous year.

CHAPTER III.—FINANCIAL RESULTS.

35. The following abstract compares the financial position of the year under report with that of the previous year and the average of the preceding quinquennium :—

—	1913-14.	1912-13.	Average of preceding five years.
	Rs.	Rs.	Rs.
Revenue	11,26,791	10,20,163	11,43,827
Expenditure.			
A.—Conservancy and works including refunds.	2,79,854	3,77,090	4,83,703
B.—Establishments	3,73,845	3,67,743	3,37,540
Total of A and B ..	6,53,699	7,44,833	8,21,243
Net results ..	+ 4,73,092	+ 2,75,330	+ 3,22,584

The gross receipts are Rs. 1,06,628 more than the previous year and Rs. 17,036 less than the quinquennial average.

The net results show a surplus of Rs. 4,73,092, or 71·8 per cent. increase when compared with that of last year.

About 41 per cent. of the expenditure was devoted to the up-keep and improvements of the forests and 59 per cent. to exploitation, etc. It will be observed from Form No. 79 that the value of timber and other produce at sale depots at the close of the year amounted to Rs. 3,044 which is less than that of the previous year by Rs. 5,112.

The outstanding revenue at the beginning of the year, was Rs. 5,32,919 and Rs. 4,27,973 at the close of the year. Of the latter Rs. 4,04,275 represents lease amounts falling due after the close of the year.

The important variations under the several heads are explained below :—

RECEIPTS.

(i) *By Departmental Agency.*

Timber—Rs. 13,685. Due to the discontinuance of departmental operations.

Fuel—Rs. 52,110. Due to the same reason.

N.B.—This year's realizations under timber and fuel represent the value of last year's stock disposed of this year and from sale of material obtained in cutting of lines.

Bamboos—Rs. 1,692. Due to the cause explained under timber and fuel.

Sandalwood—Rs. 2,844. Due to less number of trees extracted under selection system in *Bellary* district.

Minor forest produce + Rs. 784. Does not call for remarks.

(ii) *By Purchasers.*

Timber + Rs. 9,527. Due to increased revenue from value of trees on darkhast lands.

Fuel + Rs. 57,527. The increase occurred in all the districts except *Anantapur*, from further development made in the contract system except in *Chittoor*, and to better revenue realized for casuarina sales in *Nellore*.

Bamboos + Rs. 3,238. Due chiefly to greater number of bamboo coupes sold and to keen competition in *West Cuddapah*.

Grazing + Rs. 10,202. Increase occurred in all the districts except *Nellore* and *West Cuddapah* for the reasons explained in Chapter II.

Minor forest produce + Rs. 77,239. Due chiefly

(1) to the collection of five instalments of tangedu bark (Cassia auriculata) during the year as against three in the previous year and to leasing the collection of bark from some closed areas and to larger realizations of Amaroy sales in *Bellary* ;
(2) to increased revenue for tangedu bark lease in Anantapur and Guntūr districts ; and
(3) to better prices obtained for produce on unreserved lands in Chittoor.

(iii) *Miscellaneous (including confiscated drift and waif wood).*

Revenue + Rs. 18,442. Is a fluctuating item and needs no explanation.

EXPENDITURE.

A.—Conservancy and Works.

The expenditure fell short of the previous year by Rs. 1,01,541 and is due

(1) to the discontinuance of departmental operations in all districts ;
(2) to the restricted programme of roads and buildings in accordance with orders received from Government on the advice tendered in Mr. Beadon Bryant's memorandum ;
(3) to the curtailment of cultural operations in *Bellary* and *Anantapur* ;

(4) to the abandoning of further planting operations in *Guntūr* and *Nellore* districts;
(5) to reduction of temporary establishment chiefly in *Bellary*; and
(6) to less regeneration works carried out in *Anantapur*.

B.—Establishment.

+ Rs. 6,102. Due to the changes among officers and to the posting of an Assistant Conservator and an Extra Assistant Conservator to the Circle.

CHAPTER IV.—ADMINISTRATION.

36. Mr. H. B. Bryant held charge of the Circle throughout the year. An Assistant Conservator Mr. D. L. Sathe joined the service during the year and was attached to this Circle from 19th March 1914 and posted to Chittoor.

37. *New ranges.*—The Cuddapah range was divided into two viz., Cuddapah and Pulivendla ranges. In *Bellary* district the ranges of Rayadrug and Bellary were amalgamated and formed into one range viz., Bellary. Similarly the ranges of "Adoni" and "Alur" were amalgamated into one as the Adoni range; and in *Chingleput* district, Saidapet range was abolished and was added to the "Chingleput range."

In the above named ranges as previously constituted there was insufficient work to justify any of them being retained as a separate charge. The forests within the Chittoor district administered by District Forest officers, North Vellore and East Cuddapah were permanently transferred to those districts respectively by alteration of district boundaries.

38. *Conduct of the executive establishment.*—Two Rangers were dismissed, two Rangers and four Deputy Rangers were removed from service, one Ranger was reduced and the services of three Deputy Rangers were terminated. The Acting Conservator regrets to state that it is impossible to regard the conduct and work of the executive establishment in the Circle as satisfactory. Range officers, with a few commendable exceptions seem to me to fail to realise the real responsibilities of the important positions entrusted to them. This I believe, is partly due to the fact that they are not sufficiently taught and instructed by their District Forest officers, but more largely is it due to the poorness of the salaries, especially in the lower grades, which are paid to them for such positions of responsibility. No opportunity has been lost during the year in impressing upon District Forest officers the essential necessity of taking much trouble to instil into Range officers their great responsibilities and fully instructing the latter as to their works and it is hoped that before long the pay and prospects of the executive establishment will both be materially improved; if this be done and if District Forest officers will impress upon their Rangers to the utmost of their ability their great responsibilities and duties to the full, not alone on one occasion but whenever opportunity offers, the Acting Conservator believes that it will not be long before a very marked improvement not only in conduct but in the quality of work turned out will be obtained. Range officers must not be left too much to themselves nor expected to know everything from the start. More especially does this apply to young Rangers fresh from the Forest College who need careful and patient training and teaching in the way they should go.

39. *Protective staff.*—The conduct of this staff continues to be very unsatisfactory. It is known however that the Board fully realises the position both of the executive and protective establishments and has, it is understood, recently submitted to Government proposals which, if accepted, will go far to improve the present state of affairs very rapidly.

40. *Ministerial establishment.*—The conduct of the ministerial establishment was on the whole fairly satisfactory.

41. *Health of establishment and casualties.*—The health of the establishment was bad as usual in *West* and *East Cuddapah* and in parts of *Nellore* and *Chittoor*. One Forest Guard in *East Cuddapah* and one Deputy Ranger in *Bellary* died of fever; one Forest Guard and a Forester of cholera while undergoing training in the Vernacular Training School in *Anantapur* district.

42. *Relations between Revenue and Forest officers.*—The relations between Revenue and Forest officers continued to be cordial, and there have been no complaints.

43. *Service books.*—The service books are reported to have been maintained and verified in all the districts.

44. *Inspections by the Commissioner of Forests.*—The Commissioner visited Chingleput and Nellore as well as Chittoor in connection with the introduction of the panchayat system and inspected some of the forests therein to determine classification. He held conferences and explained to the Revenue and Forest officials present the ideas and objects of the proposed panchayat system. He also visited Kodur in *East Cuddapah* district and inspected some of the forests in the neighbourhood more particularly in connection with the timber improvement system recently introduced for the valuable Red Sanders areas.

45. *Conservator's inspections.*—All the districts of the Circle were visited during the year and all the District Forest offices were inspected. Some of the forests in *Anantapur*, *Guntur*, *Chingleput* and *East Cuddapah* were inspected and inspection notes on the same were forwarded to the Board and the Collectors concerned. Some forests in *Bellary*, *Chittoor*, and *Nellore* districts were also inspected.

46. *Touring of District Forest Officers.*—All the District Forest Officers spent more than six months in camp.

47. *Inspection of Range offices.*—All range offices were inspected by District Forest officers or their assistants except one in *West Cuddapah* and two in *Nellore.* The omission in the former was due to the range having been newly formed and in the latter no explanation has been given except that they were both inspected very soon after the close of the year.

48. *Audit of accounts of District Forest offices.*—The accounts of all the District Forest offices *except East and West Cuddapah and Anantapur were* inspected by the special staff of the Accountant-General's office and results reported to be satisfactory.

49. *Imperial Forest Institute and College, Dehra Dun.*—One nominated Provincial Probationer was deputed to the College and is now undergoing his course of training.

50. *Madras Forest College, Coimbatore.*—Of the 8 second year students (1912) one was removed for misconduct and of the remainder, one obtained the Honour's Certificate, 5 the Ranger's Certificate and 1, the Forester's Certificate. Of the first year students (1913), one Probationary Deputy Ranger was found unfit to follow the course and was removed.

51. *Vernacular Training School for Foresters and Forest Guards.*—The second session of the school in the Circle was held in *Anantapur district.* Thirty-one students were deputed from *Guntur*, *Nellore*, *Bellary and Anantapur.* At the close of the session there were only 17 students. There was, most unfortunately, an outbreak of cholera whilst the school was at Kadiri and one Forester and one Forest Guard succumbed to it. During the outbreak several of the students bolted away in panic and were not allowed to return and from this cause and the fact that a few had to be granted leave on account of ill-health at other times the original number of students was reduced to 17.

After some four months of the session had gone by it became evident that the Senior Instructor Ranger M.R.Ry. B. Sanniah had proved his utter want of moral fibre and trustworthiness and he was removed from his post and the Junior Instructor Ranger M.R.Ry. K. R. Viswanatha Ayyar took direct charge of the school till the remainder of the session.

As a class the students of this session were reported to be a poor lot and did not at all compare favourably with those of the previous session.

52. *Panchayat management.*—During the year four panchayats were actually started in *Chingleput* and three in *Anantapur.* Since the close of the forest year four more in *Chingleput* and one in Nellore have been formed, and proposals for another in the last-named district await the Board's approval.

The Oragadam reserve under panchayat was inspected by the Commissioner, Conservator and Collector during the year and the management was found to be passable.

The following list gives the names of reserves handed over to panchayat management up to date :—

CHINGLEPUT DISTRICT.

Eight Panchayats.

Thambiram reserve ... ... Maduraipakkam reserve ...	*Vide* B.P. Forest No. 348, Mis., dated 9th June 1914, to be managed by three panchayats.
Erumaivettipolayam ... ... Attantangal and ... ... Siruvada	*Vide* B.P. Forest No. 464, Mis., dated 30th July 1914, by four panchayats.
Oragadam panchayat ...	Already sanctioned. B.P. Forest No. 484, Mis., dated 6th August 1914.

ANANTAPUR DISTRICT.

Three Panchayats.

Kanampalle reserve	*Vide* B.P. Forest No. 350, Mis., dated 10th June 1914, to be managed by three panchayats.

NELLORE DISTRICT.

One sanctioned Panchayat and another to be sanctioned.

Karedu Reserve	*Vide* B.P. Forest No. 553, Mis., dated 31st August 1914, one panchayat.
Kavili main block and Extension reserves.	Proposals to have the same handed over to a grazing panchayat were received from the Collector in his No. 1649 Gl./For. of 14, dated 19th August 1914, and was forwarded to the Board with this office C. 1780/14, dated 21st August 1914.

53. *Work and service of superior officers.*—The remarks of the Collectors on the work of the District Forest Officers are given below :—

Cuddapah—By Mr. E. A. Davis.—"Mr. T. A. Whitehead was in charge of the district from 1st July 1913 to 30th June 1914 in addition to East Cuddapah. It is unfortunate that the necessity for placing two such heavy charges under one officer should have arisen. Mr. Whitehead has however not spared himself in the task of bringing West district into order, and now that a more honest set of subordinates may be expected, the result of his efforts is likely to become quickly apparent" East "Mr. Whitehead's work is sufficiently well known to need no commendation from me; while as regards Mr. Abd-ul-qadir Sahib I have heard nothing which is not favourable."

Nellore—By Mr. R. Ramachandra Rao.—"Mr. Arbuthnot had taken charge when I returned from furlough last November. I am very glad to note that he has infused a new spirit in the forest administration. His relations with the public are very cordial and he has been always rendering me great service in a rather eventful year of changes."

Chittoor—By Mr. H. L. Braidwood.—"The report itself seems to indicate that Mr. Jackson's management of the district was efficient."

Guntur—By Mr. J. N. Roy.—"Mr. Stracey is working zealously."

Conservator's remarks.—All District Forest Officers have done their best with varying degree of success. For special mention I have pleasure in naming Mr. T. A. Whitehead whose work in the two heavy charges of East and West Cuddapah has been excellent.

CHAPTER V.—GENERAL.

54. *Realizations of revenue from the usufruct of toddy-yielding trees on Government wastes and poramboke lands.*—The revenue realised was Rs. 54,624 against Rs. 57,770 of the previous year.

55. *Measures adopted to encourage the growth of manure-leaf-yielding plants.*—Nothing was done, as these operations were ordered to be abandoned.

RULES UNDER THE FOREST ACT.

56. *Timber Transit Rules.*—The existing rules are stated to have worked satisfactorily in *Guntur and Chittoor.* The revised rules for Cuddapah were sanctioned and brought into force. They are reported to have worked satisfactorily so far, but the effect of them cannot be properly gauged at this early stage.

57. *Rules under section 26 of the Forest Act.*—The privileges allowed under these rules were generally availed of and there were no serious complaints or abuses brought to light.

58. *Inventory of valuable stock.*—The stock registers are reported to have been maintained and verified in all the districts.

59. *Rain-gauges.*—Rain-gauges were maintained in all the divisions except *Chingleput.*

60. *Supply of forest produce.*—Departmental operations have been entirely stopped and the contract system has been introduced in all the districts and is making good progress. The wants of the public are met from the depots opened by contractors and by sale at the coupes. For want of effective demand no small fuel coupes for rural supply have been opened and an attempt made in Anantapur to sell a coupe standing for supply to Kadiri town failed.

61. *Rules for the guidance of Forest officers in compounding forest offences.*— *Vide* paragraph 15 of Chapter II.

62. *Cultivation in reserved forests with a view to growing trees.*—In *Bellary*, no new areas were leased out. The plants of 1908 in Banavasi reserve have established themselves and are said to be 3′ to 8′ in height and those of 1911–12 in Budanahal reserve from 4′ to 8′. The sowing operations in the old Alur range proved a thorough failure; the area was thrown open to grazing. In *Anantapur*, a few acres of land were assigned to Ghat Talayaries for cultivation with certain restrictions. In *East Cuddapah*, the patta given in previous years was renewed.

63. *Suits.*—In *Bellary*, the suit referred to in the previous year's report is reported to be still pending. In *Nellore*, the Nandanavanam boundary dispute case between the Maharaja of Venkatagiri and the Government and the Veligonda boundary dispute case between Government and shrotriemdar of Turravaripalam were both decided in favour of Government.

64. *Live-stock.*— *Vide* Form 84. Two buffaloes are used at Horsleykonda, Chittoor district, for gardening purposes and carriage of water and no other live-stock is now maintained in the Circle.

65. *Mining.*—In *Bellary*, a mining lease over 1,609 acres in four villages of Harpanahalli taluk was granted to Mr. A. Ghouse of Dhone for a period of 30 years from 2nd February 1914 on payment of an annual royalty of Rs. 1,609. Application for a similar purpose from Mr. A. Ghouse in the Copper Mountain of the Bellary taluk is pending disposal. The exploring license granted to Mr. A. Ghouse for a portion of the Bellary reserve was renewed for another year from 30th October 1913. A prospective license was granted to Messrs. A. M. Jeevanjee & Co., Bombay, for red oxide in two reserves covering an area of 536 acres for one year from 18th November 1913, on payment of a surface rent of Rs. 134. Four other applications for prospecting licenses were received and they are pending disposal. In *Anantapur* no additional licenses for prospecting gold were given in the year. In *Guntur*, the exploring license for diamonds and precious minerals granted to Messrs. Jambon & Co., Calcutta, in Venkatayapalem reserve and its extension expired by end of first half of the year. During the second half of the year the company has been demarcating plots for which they intend to apply for a prospecting license. Seven plots of about one square mile were demarcated and very rough sketches of the areas demarcated were received but they were returned for submission of more accurate ones drawn to proper scale.

NELLORE MICA AND MICA MINES.

66. *Applications.*—Seventy-nine applications were pending at the beginning of the year and 72 were received in the course of the year. Of these 93 were disposed of, leaving 58 pending at the end of the year.

Mines in Government lands (State mines).—The number of working mines in force at the beginning of the year was 35. In two cases the existing leases were determined and fresh leases were sanctioned in lieu thereof, and there were no relinquishments but two leases were cancelled. Eleven fresh leases were sanctioned and nine cancelled mines of M.R.Ry A. Subba Nayudu were handed over to the Official Receiver appointed by the Court so that 53 mining leases remained at the close of the year including those for China clay, Garnet and Samarskite.

Prospecting licenses.—Twenty-eight licenses were in force during the year for varying periods.

Patta land mines (shared mines).—Two out of the 23 agreements shown at the close of the last year were relinquished and there were seven fresh grants so that there were 28 in force at the end of the year. Of these, the Shah and Pallimitta mines of Messrs. Badsha Saheb & Co., the Lakshminarayana of Mr. R. Lakshminarasa Reddi, Pattabhirama mine of Y. Audemma, the Bhupatri of G. Subramanya in Dundigam and the Kubera Patta land mine of Chennur are reported to have worked well.

Mines in permanently-settled estates (private mines).—Twelve new mines were added to the 11 mines shown in the last report. The mines in the shrotriem and zamindari lands yielded lbs. 261,452 of mica valued at Rs. 1,72,010. The best worked of these is that in the shrotriem village of Kalichedu.

Illicit mining.—In the case reported as pending last year the accused was fined Rs. 40. There were no fresh cases during the year.

Outturn and royalty.—The figures when compared with that of the previous year would show that in spite of the outturn being less than in the preceding year the amount of royalty shows an increase owing to the fact that the revised scale of schedule value was in force for only a portion of the previous year. Besides Mica 19,158 lbs. of china clay, 6,720 lbs. of Garnet and 316 lbs. of Samarskite were also obtained and a royalty of Rs. 17 was realized. China clay and Samarskite did not find a good market and there was no incentive for working the latter.

Year.		LB.	OZ.	RS.
1912–13	...	1,160,703	12	23,505
1913–14	..	826,512	2	27,637

Financial results.—The revenue realized was Rs. 32,940 against Rs. 26,106 of the previous year and the expenditure Rs 4,953 against Rs. 4,256.

Labour.—On an average 2,974 persons worked daily against 2,092 of the previous year. The wages continue to be the same as in the last year. Machines are used for pumping water in many of the mines. There is an electric installation at Kalichedu for pumping and haulages.

Accidents.—There were two accidents during the year against one in the previous year.

Ventilation and lighting in tunnels.—No change has occurred under this head.

Inspection by superior officers.—The District Forest Officer visited two of the mines, the Revenue Divisional Officers five, District Medical and Sanitary Officers three, the Collector four and the Inspector of Mines 35. Steps are being taken in carrying out the suggestions of the District Medical and Sanitary Officer regarding sanitation and trenching.

Prospects of industry.—Work in only three of the cancelled mines of A. Subba Nayudu was started during the year. No work was done in any of his other mines at all.

MADRAS,
4th September 1914.

H. B. BRYANT,
Ag. Conservator of Forests, Central Circle.

INDEX.

FOREST ADMINISTRATION REPORT,

MADRAS PRESIDENCY,

SOUTHERN CIRCLE, 1913–1914.

Chapter.	Subject.	Paras.
	Quinquennial Review from 1909–1910 to 1913–1914.	
I	Constitution of State forests—	
	1. Alteration in area	1
	2. Forest settlement	2
	3. Demarcation	3
	4. Forest surveys	4
II	Management of State forests—	
	1. Regulation of management—	
	(*a*) Preparation and control of regular working-plans ...	5
	(*b*) Annual plan of operations	6
	2. Communications and buildings—	
	(*a*) Roads and bridges	7
	(*b*) Buildings	8
	(*c*) Miscellaneous works	9
	3. Protection of forests—	
	(*a*) General protection	10 to 12
	(*b*) Protection from fire	13 to 15
	(*c*) Protection from cattle	16
	(*d*) Protection against injuries from natural causes ...	17
	4 Sylviculture—	
	(*a*) Natural reproduction	18
	(*b*) Artificial reproduction	19 & 20
	(*c*) Operations for improvement of the growing stock ...	21
	(*d*) Experiments	22
	5. Exploitation—	
	(*a*) System of management—	
	(i) Major forest produce	23 to 26
	(ii) Minor forest produce	27 to 30
	(*b*) Agency of exploitation—	
	(i) Departmental agency	31
	(ii) Purchasers	32
	(iii) Rights and privileges	33
	(iv) Free-grants	34 & 35
	(*c*) Outturn and sources of forest produce	36
III	Financial results	37
IV	Administration	38 to 52
V	General	53 to 73
	Appendices A to E and Forms Nos. 65 to 85	

FOREST ADMINISTRATION REPORT OF THE SOUTHERN CIRCLE

FOR THE

FOREST YEAR ENDING 30TH JUNE 1914.

SUMMARY OF PROGRESS DURING THE FIVE YEARS 1909-1910 TO 1913-1914.

INTRODUCTION.

Administration.—The Circle was formed on the 11th October 1911. It comprises the districts of North and South Arcot, Salem, Trichinopoly and Tanjore transferred from the Central Circle and Madura, Tinnevelly and Rāmnād transferred from the old Southern Circle.

Mr. J. S. Battie, Conservator of Forests, has been in charge from the date of its formation.

2. In accordance with Sir William Meyer's scheme of redistribution of districts, Palmanēr, Chittoor and Chandragiri Ranges of the old North Arcot district with a forest area of 527 square miles, were transferred to the newly-formed Chittoor district and Karūr taluk with a forest area of 3 square miles, was transferred from Coimbatore to Trichinopoly district of this Circle. Under the same scheme, Tiruppattūr and Tiruvannāmalai ranges were transferred from Salem and South Arcot districts and added to North Arcot and Namakkal Range from Salem district was added to Trichinopoly. The present North Arcot district was divided into two forest divisions from 1st December 1911.

3. *Organisation.*—During the period under review, a scale of pay based on the length of service has been introduced in the Provincial Forest Service. The augmentation of the Subordinate Forest Service sanctioned by the Secretary of State at the close of the previous quinquennium was given effect to during 1909–1910. Eleven additional Deputy Rangers were sanctioned for the Circle and pay of Range clerks was improved during 1913–14.

4. *Changes in area.*—The area under the control of the department fell from 4,483 square miles to 4,430 square miles. The difference was chiefly due to disafforestation made at the close of the period.

	At commencement of the period.	At close of the period.
	SQ. MLS.	SQ. MLS.
Reserved forests	4,431	4,359
Reserved lands	52	71
Total ...	4,483	4,430

5. *Forest settlement.*—Reservation being practically complete in the Circle, only 25 square miles of reserved lands have been brought under settlement. Excluding correction of areas, disforestations, etc., the area finally settled at the close of 1913-14 amounted to 4,359 square miles against 4,431 square miles at the end of 1908–09.

6. *Demarcation.*—The total length of artificially marked boundaries at the close of 1913–14 was 8,746 miles. During the quinquennium, 877 miles of boundaries were permanently demarcated, the major portion of the work being done in Madura.

7. *Forest surveys.*—The survey of the reserved forests of the Circle on 2″=1 mile scale, was taken up by the Survey of India party during 1913–14 and an aggregate area of 177 square miles was topographically surveyed. Departmental surveys call for no remarks.

8. *Working plans.*—During the quinquennium, working plans were compiled and sanctioned for 450 square miles. An aggregate area of 1,065 square miles has been taken up for preparation of working plans. The area for which working plans have still to be taken in hand is 522 square miles. During 1913–1914, a Special Working-plans Officer was posted to the Circle.

9. *Communications and Buildings.*—The average annual expenditure on communications, buildings and other works, amounted to Rs. 83,538 during the period under review as compared with Rs. 45,157 during the previous five years. The large increase is due to the opening up of forests for exploitation and providing the staff with rest-houses and quarters. The steady increase of revenue has justified the outlay.

10. *Forest offences.*—The average annual number of forest offences reported during the quinquennium under review was 12,553 as compared with 12,375 during the five years ending with 1908–1909. Cases of injury to the forests by fire show an average annual increase of 47, due to a better record of fires being kept. Offences of unauthorized fellings increased by 6·7 per cent. Offences of illicit grazing and other offences fell by 9·4 and 16·5 per cent. respectively.

11. *Fire protection.*—During the period under review the average area under systematic fire protection amounted to 1,046 square miles, the average failure being 1·6 per cent. In the previous period, the average area under protection was 865 square miles, while failures amounted to 2·4 per cent. The increase in the areas brought under protection was chiefly in South Salem and Madura.

12. *Protection from cattle.*—As observed by the Inspector-General of Forests in his review for the previous quinquennium, the question of regulating grazing is not an easy problem, and little progress has yet been made towards its solution. During the period under review, the average area, closed to all animals increased by 65 square miles or 10 per cent. and that open to browsers fell by 52 square miles or 27 per cent. The average area open to grazing was 3,871 square miles against 4,405 square miles in the previous period. The decrease during the period under review is chiefly due to the exclusion of the area of three Ranges of the old North Arcot district transferred to Chittoor district. The average number of all animals admitted to graze increased from 1,169,106 in the previous quinquennium to 1,204,285 in the period under review. Of the former number 55,969, and of the latter 48,209 were browsers so that there was a decrease amounting to 14 per cent. in the number of animals of this class admitted to pasture. From the commencement of the current year, all reserves have been entirely closed to goats. There was an increase amounting to 4 per cent. in the number of cattle other than browsers for which grazing was provided although the area open to such animals was less.

13. *Yield and outturn.*—The following statement shows the average annual outturn for the two periods:—

—	Timber and fuel.	Bamboos.	Minor produce.
	C. FT.	NO.	RS.
1904–05 to 1908–09	8,325,114	16,446,568	2,08,774
1909–10 to 1913–14	9,207,677	17,459,148	2,51,092

There was an increase under all heads. The outturn of timber and fuel increased by 10·6 per cent. that of bamboos by 6·2 per cent. and that of minor produce by 20·3 per cent.

14. *Financial results.*—The average annual financial results for the two periods were as follows:—

—	Revenue.	Expenditure.	Surplus.
	RS.	RS.	RS.
1904–05 to 1908–09	11,24,141	6,39,755	4,84,386
1909–10 to 1913–14	13,76,456	7,31,875	6,44,581

The average gross revenue, expenditure and surplus all show a general increase, the percentages being 22·4, 14·4 and 33·1 respectively.

15. *Forest education.*—During the period under review, the Madras Forest College was opened at Coimbatore. Three Rangers and three Deputy Rangers have returned to the Circle after training. There are now under training eight Government and two private students belonging to this Circle.

A vernacular school for training foresters and forest guards was opened in the circle in February 1912. Three sessions have been held and the results are as follows :—

Period of session.	Total number of students trained.	Award of certificates.		
		First class.	Second class.	Third class.
February to July 1912	29	14	12	3
February to July 1913	26	8	16	2
February to July 1914	24	4	8	12

It is reported that the students have gained much experience in practical work.

CHAPTER I.—CONSTITUTION OF STATE FORESTS.

1. Alteration in Area.

Reserved forests.—An addition of 42 acres by transfer from reserved lands, and a deduction of 34,605 acres by disafforestation and recomputation of areas of reserves, were the alterations during the year. Twenty-five thousand one hundred and seventy-eight acres, enclosures in the Javadis in North and South Vellore, 5,330 and 742 acres of casuarina plantations in South Arcot and Trichinopoly *cum* Tanjore respectively and 33 acres in Milavittan reserve in Tinnevelly were disafforested. Three thousand three hundred and twenty-two acres were excluded in Madura, on account of recomputation of areas of reserves investigated by the Special Deputy Collector. The total area of reserved forests in the circle at the end of the year was 4,359 square miles.

Reserved lands.—Two small extensions aggregating 27 acres in South Vellore, Jarugumalai block of 7,830 acres in South Salem, Gundur extension of 2,464 acres in Trichinopoly and two small extensions of 4 acres in Madura were newly constituted. Forty-two acres were transferred to reserved forests and 33 acres excluded at settlement. The area of reserved lands in the circle at the end of the year was 71 square miles.

2. Forest Settlement.

2. One small addition in North Vellore and six in Tinnevelly were finally settled during the year. Two blocks and four small extensions aggregating 10,325 acres were brought under settlement. The balance under settlement was 19 blocks, but the actual settlement of eight of these was completed.

3. Demarcation.

3. Ninety-four miles of permanent demarcation was carried out during the year in Madura at a cost of Rs. 4,082. In South Salem, the boundaries of five reserves were lockspitted. In South Arcot, a sum of Rs. 157 was spent on rectification of defects in the demarcation of five reserves. Two hundred and ninety nine miles of boundaries, and cairns wherever necessary, were repaired at a cost of Rs. 1,048, and 6,058 miles were re-cleared by subordinates free of cost. Two hundred and forty-four miles remained to be demarcated at the close of the year of which 226 miles are in Madura. During the year, revised notifications for nine reserves on the Palni Hills (Perumalmalai, Talayarkadu, Kadamaravu, Thogavaraishola, Pambar,

Karungal-Dhonimedu, Adukkam, Shengalvarayar and Amburivi) have been prepared by the Special Deputy Collector. It is reported that the reinvestigation of all reserves on the Palni Hills will be completed within the period for which the Special Deputy Collector and his establishment have been sanctioned, viz., 15th June 1915.

4. Forest Surveys.

4. During the year, 146 square miles in South Vellore, 7 square miles in South Arcot and 24 square miles in South Salem were topographically surveyed on 2 inches=1 mile scale by the Survey of India Party. In South Vellore, a surveyor was employed in aligning the Kottur bridle-path. In South Arcot, survey of the coupes of the year was done by the draftsman and range establishment. In North Salem, one surveyor was engaged for a part of the year, in tracing and preparing an estimate for a road from Biligundlu to Kestur but the work was found by the District Forest officer to be incorrect. Another surveyor was employed in laying out coupes, checking the demarcation of reserves, preparing estimates for the demarcation of certain enclosures and revising the estimate and plan for the proposed road from Aiyur to join the Anchetti-Pennagaram road. In South Salem, a surveyor was employed in aligning and preparing estimates for certain roads. In Tinnevelly, a surveyor was engaged in surveying and preparing estimates for 10 miles of roads, and surveying a trace in continuation of the Gantamanaikanur bridle-path. At the close of the year, one hundred and seventy-six square miles remained to be surveyed and final maps have to be prepared for 250 square miles.

District forest reference and other maps referred to in section 80 of the Forest Code were maintained and posted.

CHAPTER II.—MANAGEMENT OF STATE FORESTS.

1. Regulation of Management.

(*a*) *Preparation and Control of Regular Working Plans.*

5. *Preparation—South Vellore.*—A working plan for the Tenmalai Javadis prepared by Mr. R. B. Cornwell, Extra Assistant Conservator has since the close of the year been submitted to Board for sanction. Mr. C. C Wilson, Special Working Plans Officer is engaged in preparing working plans for the sandal areas in North Arcot and Salem districts. Reconnaissance reports for the Javadis and Chitteris have been approved by the Conservator. *South Arcot.*—A working plan prepared for Gingee hills and other areas could not be completed, pending orders on classification of the reserves. *North Salem.*—The working plan prepared by Mr. J. Sadasiva Ayyar for the Dharmapuri range has been returned by the Board for revision. *South Salem.*—A working plan prepared for the bamboo areas in the Chitteri hills has been provisionally approved by the Conservator. *Trichinopoly.*—Working plans prepared for Padugais and the upland reserves in Kulittalai and Udaiyarpalaiyam ranges are still held in abeyance pending final orders regarding control of padugais. *Madura.*—A reconnaissance report for the pine forests was provisionally approved by the Conservator. A detailed report is under preparation.

Control—South Salem.—The working plan for the Mavar Working Circle was revised and Board's sanction obtained therefor and that for East Shevaroys is under revision. In this division most of the working plans require revision and proposals will be submitted after the classification of the reserves is sanctioned by the Board. *Madura.*—Proposals for the revision of the prescriptions relating to timber in the working plan for Cambum range have been approved by the Board. The following were the chief deviations from the existing working plans: In the *North* and *South Vellore* divisions, the number of arrear coupes is increasing due to want of demand and difficulty of transport. For the same reasons 25 and 51 coupes respectively prescribed for the year under report were not worked. *South Arcot.*—Working of several coupes in Kallakurichi range fell into arrears for want of demand and

good contractors. *North Salem.*—Fellings still continue to be behind hand. Five arrear coupes were worked during the year. *South Salem.*—A large number of arrear coupes were worked during the year. *Madura.*—Arrear coupes aggregating 694 acres were sold. In Palamedu range, a new working circle called Periatope Working Circle has been provisionally formed pending complete revision of the working plan for the whole range. The sanctioned working plans in all districts require revision.

(*b*) *Annual Plan of Operations.*

6. Besides the deviations mentioned in paragraph 5 *supra*, the other important deviations were: *North Vellore.*—Construction of two rest houses was postponed and expenditure on cultural operations was curtailed. *South Vellore.*—Alignment of two ghat roads was not taken up for want of establishment and construction of lines for subordinates was postponed on account of delay in acquisition of the sites. *South Arcot.*—Certain building works were not taken up pending classification of the reserves in the district. *South Salem.*—The construction of certain expensive buildings and roads was not taken up chiefly for want of funds. *Madura.*—The construction of two cart tracks and two bridlepaths, and of Range office and Range clerk's quarters at Palamedu was postponed for various reasons.

2. COMMUNICATIONS AND BUILDINGS.

(*a*) *Roads and Bridges.*

7. The total expenditure on new works amounted to Rs. 16,663 and on repairs to Rs. 24,457, as compared with Rs. 12,307, and 23,337 respectively in the previous year. In North Vellore four new roads of 14 miles, were constructed at a cost of Rs. 3,593. In South Vellore, large amounts were spent on repairs to (1) Patrakad Ghat road and (2) Andiappanur-Kambugudi road. In North Salem, bridlepath from Vettuvamalai to Sanniyasamalai was completed. A road from Biligundlu to Hogainkal was commenced and 79 miles of existing roads were repaired. *South Salem.*—A road from Pudupatti to Pillayarkoil and a bridlepath from Pappireddipatti to Kombutukki were constructed. Another road from Namagiripet to Varagur was commenced and partly completed. In Madura, 109 miles of existing roads were maintained at a cost of Rs. 8,571. In addition to these 17 Local Fund roads were maintained from funds provided by the District and Taluk Boards.

(*b*) *Buildings.*

8. During the year, the total expenditure on new buildings and on repairs amounted to Rs. 42,852 and Rs. 13,951 respectively. The important new works were: *North Vellore.*—Completion of Range Officer's quarters at Odugathur and construction of quarters for subordinates at the same place. *South Vellore.*—Completion of rest house and outhouses at Shenbagatope and part construction of subordinates' quarters at Pudupaliem. *South Arcot.*—Part construction of a rest-house with outhouses and quarters for subordinates at Turinjikadu. *North Salem.*—Completion of rest-houses and outhouses at Anchetti, Jowlagiri and Karadiyur and part construction of Hogainkal rest-house, and range quarters at Kadayampatti and Range office and quarters at Anchetti and Mecheri *South Salem.*—Completion of rest-houses at Kombutukki and Pappireddipatti, and part construction of subordinates' quarters at Achankuttaipatti. *Trichinopoly.*—Completion of rest-house and outhouses at Kulivalavu. *Madura.*—Completion of Ayalur rest-house and part construction of rest-houses at Marianshola and Vannathiparai, and subordinates' lines at Guruvanuthu, Kanavoipatti and Nattam. *Tinnevelly.*—Construction of quarters for subordinates at Khansapuram.

(*c*) *Miscellaneous Works.*

9. *North Salem.*—Bunding streams in Nagaramalai reserve. *Tinnevelly.*—Building up of the high bank of the Mundanthorai rest house compound overlooking the Serviar was completed. Fifteen new wells were sunk and several of the old wells were deepened or repaired and compounds were fenced in several districts.

3. Protection of Forests.

(a) *General Protection.*

10. The following statement gives the number of offences of the year compared with the previous year:—

Class.	Injury to forests by fire.		Unauthorized felling or appropriation of wood and minor forest produce.		Grazing without permission or in the tracts in which grazing is prohibited.		Other offences.		Total cases.	
	1912-13.	1913-14.	1912-13.	1913-14.	1912-13.	1913-14.	1912-13.	1913-14.	1912-13.	1913-14.
Cases taken to court.	15	10	1,459	1,868	472	682	112	159	2,058	2,719
Cases compounded ..	1	5	7,040	7,197	2,762	2,747	250	358	10,053	10,307
Cases undetected ..	241	308	160	189	50	9	8	11	459	517
Total ..	257	323	8,659	9,254	3,284	3,438	370	528	12,570	13,543

The total number of offences reported during the year exceeded that of the previous year by 973. The increase was under all heads and chiefly under unreserved lands, due to detection of a larger number of offences in South Arcot and Trichinopoly districts. Last year owing to want of complete details the offences reported from unreserved lands in Madura were not included in the report. Under classification of offences there was an increase chiefly under unauthorized felling in unreserved lands.

Cases brought to trial.

Year.	Convictions.	Acquittals.	Percentage of failure.
1912-13	2,043	168	7·60
1913-14	2,690	166	5·81

There was a satisfactory decrease in acquittals in all the districts except South Vellore. Disposal of long pending cases which ended in acquittal, accounts for the increase in South Vellore.

Cases compounded.

Year.	Number of cases.	Amount.
		Rs.
1912-13	9,504	95,116
1913-14	9,391	86,658

As usual a large number of cases were compounded. In fixing the amount of compensation, attention was generally paid to the orders contained in G.O. No. 1990, dated 13th June 1910. In North Vellore and South Arcot, heavy compounding fees were levied in cases of illicit goat browsing. In Madura, the compounding fee was fixed, generally at a lower rate.

11. Punishments inflicted by Magistrates continued to be satisfactory. In North Salem, a case of threatening the Extra Assistant Conservator, Mr. J. Sadasiva Ayyar with a gun ended in the conviction of the accused to three months' rigorous imprisonment. In another case of assaulting a watcher, the accused was fined Rs. 100.

12. In North Vellore, a reward of Rs. 25 was granted to a Forester for detecting a case of illicit browsing, and a police constable was rewarded Rs. 5 for helping in the detection of a forest offence. In South Vellore, rewards aggregating Rs. 79 were paid to subordinates for detecting important cases. In North Salem, informers in an illicit shooting case were rewarded Rs. 10. In South Salem, Rs. 3 was given to two police constables as reward for detecting a forest offence. In Trichinopoly, rewards of Rs. 60 and Rs. 40 were paid to subordinates in a case of illicit shooting in reserved forests. In a similar case a forest guard and a ryot were rewarded Rs. 40 in Madura.

(*b*) *Protection from Fire.*

13. *Special protection.*—There was no change in the system of protection. The area attempted to be protected was 1,212 square miles against 1,148 70 square miles in the previous year, and the area burnt during the year was 24·56 square miles against 12·81 square miles in the previous year. The percentage of area sucessfully protected during the year was 97·97 against 98·9 in the previous year. The cost per square mile of successfully protected area rose from Rs. 13–13–4 to Rs. 16–4–1. The increase was chiefly due to a larger area brought under special protection in Madura, and to improvements in protection introduced in Tinnevelly. In this district fire lines were extended by 4½ miles and 19 miles of bridle paths were made into fire lines, and a larger number of fire patrols were appointed. From North Vellore, it is reported that the Malayalees in the Javadis continue to carry out satisfactorily their obligations in respect of prevention of fire. In South Arcot, the whole area attempted was successfully protected. In all the other districts except South Vellore, North Salem and Tinnevelly, the results are satisfactory. In South Vellore, fires caused by graziers in order to obtain new grass increased. In North Salem, want of rains from November onwards and a more accurate record of fires kept account for the increase in the area burnt. In Tinnevelly, three fires were caused by the carelessness of subordinates when burning fire lines, and the subordinates concerned were punished. In Ambasamudram range, a very serious fire extending to 1,000 acres, was caused by the carelessness of a collector of minor produce who was prosecuted and sentenced to three weeks' rigorous imprisonment. In another case of intentional firing, the accused was convicted and sentenced to three months' rigorous imprisonment. As usual, a large area was closed to grazing on account of incendiarism. Satisfactory detection in cases of fire continues to be difficult.

14. General protection was attempted over 2,962 square miles against 2,977 square miles in the previous year. The decrease was due to the transfer of certain areas to special protection. The percentage of failure fell from 1·17 per cent. to 1·04 per cent. In Trichinopoly, general protection was successfully carried out on the Pachamalais and Kollimalais by the hearty co-operation of the Malayalees.

15. The number and origin of fires are given in Appendix D. There were 320 fires burning 35,478 acres against 250 fires burning 30,539 acres in the previous year.

(*c*) *Protection from Cattle.*

16. Eighty-one per cent. of the total area of reserved forests is open to grazing of cattle but closed to goats. The area closed to all animals was 728 square miles against 729 square miles in the previous year. Goat browsing was allowed over 15 square miles in North Vellore, 37 square miles in North Salem and 33 square miles in Madura. These areas have since been closed, and goats are excluded from all reserved forests from 1st July 1914.

The number of cattle impounded during the year is given in Appendix E. The total number impounded was 55,101 against 56,642 in the previous year. The variations are generally attributed to better supervision.

The following statement furnishes the grazing incidence in each district:—

Districts.	Number of cattle in cow units.	Area in acres.	Number of acres per cow unit.
North Vellore	128,230	275,200	2·14
South Vellore	157,226	423,680	2·69
South Arcot	162,491	199,040	1·22
North Salem	144,923	468,480	3·23
South Salem	114,772	350,080	3·05
Trichinopoly	149,080	202,880	1·36
Madura	117,666	346,880	2·94
Tinnevelly	39,342	136,320	3·46

The average incidence per head for grazing was 2·37 acres over the whole circle, the highest incidence being, as usual, in South Arcot and Trichinopoly.

(*d*) *Protection against injuries from natural causes.*

17. *North Vellore.*—A few casuarina trees were attacked by fungus and these plants were rooted out and sold. *South Arcot.*—One hundred and fifty-seven mango plants died owing to roots being attacked by white ants. In this district as well as in Trichinopoly, the parasite *Loranthus longiflorus* affects the growth of *Albizzias* and *Melias*. *North Salem.*—During the year, spike was found to have attacked Sandal-wood in the Jowlagiri reserve, Hosūr range. Fifteen thousand three hundred and sixty-eight trees and seedlings were removed to prevent the further spread of the disease. *Tinnevelly.*—Eradication of lantana was carried out over an extent of about 113 acres at a cost of Rs. 86 and the operation will be continued. It is reported that much damage is still caused to coppice reproduction, especially Rosewood and *Albizzia Lebbek*, by Sambur.

4. SYLVICULTURE.

(*a*) *Natural Reproduction.*

18. *North Vellore.*—Reproduction from seed was fairly good especially in areas where there was less grazing, but the prolonged drought has been injurious. *Hardwickia binata* seeded profusely during the year. Seeding of teak was good in Palamady reserve. Reproduction from coppice was fair in all the felled coupes. *South Vellore.*—Natural regeneration of *Anogeissus latifolia* was particularly good on the Javadis and reproduction by coppice was satisfactory in the coupes closed to grazing. *South Arcot.*—Owing to heavy grazing and illicit browsing, reproduction by seed is generally poor. Regeneration of *Chloroxylon Swietenia* and *Acacia Sundra* is however, in places, fair and that of Red Sanders was particularly good in Salavady reserve. Coppice regeneration was satisfactory though very slow. *North Salem.*—Majority of the seedlings died, the year having been exceptionally dry. *South Salem.*—Reproduction by seed was fair in the higher slopes of the hills and in the areas closed to grazing but poor in the lower slopes and that from coppice was generally fairly satisfactory. *Trichinopoly.*—In the inaccessible parts of the higher slopes of the Pachamalais, seedlings of *Santalum album*, *Albizzia Odoratissima*, *Chloroxylon Swietenia* and *Anogeissus latifolia* were as in the previous year abundant. On the Kollimalais, reproduction of *Dalbergia latifolia*, *Santalum album* and *Albizzia amara* was fair. Coppice reproduction was generally good except in the Namakkal range *Albizzia amara*, *Wrightia tinctoria*, *Acacia leucophloea* and *Chloroxylon Swietenia* have been found to coppice best. In the padugais, *Inga dulcis* and Konnai (*Cassia Fistula*) coppiced very satisfactorily. *Madura.*—Reproduction both by seed and from coppice was generally satisfactory but the latter was slow in development. *Tinnevelly.*—Regeneration of teak was conspicuous in Srīvilliputtūr and Kuttalam coupes and remarkable in the Kalakad Working Circle where the stock was fairly dense and that of *Pterocarpus Marsupium* and *Dalbergia latifolia* by seed, was excellent in the grassy areas of Sivasailam and Kadayam forests of Ambasamudram range. Reproduction from coppice was satisfactory in all coupes closed to grazing. From districts where Sandal exists it is reported that the species continues to spread steadily.

(*b*) *Artificial Reproduction.*

19. *Regular plantations.*—During the year casuarina planting was given up. *North Vellore.*—Planting of mixed species in Amerdi plantation was fairly successful. It is reported that Rosewood and Mahogany are doing exceptionally well and that the seedlings of Red Sanders and *Hardwickia binata* transplanted are not so vigorous. *South Arcot.*—One hundred and ninty-three graft mango, 35 Mahogany and 195 Red Sanders seedlings were planted during the year. *North Salem.*—It is reported that the results of the planting of Cyprus carried out in Sanniyasimalai in 1913 are very satisfactory but patch sowing of Wattle has apparently been a failure one or two plants only being visible. Since the close of the year, about 10,000 seedlings of *Cupressus torulosa* have been planted. *Madura.*—The growth of Teak in Vannathiparai and Velancombai plantations was slow. The areas seem unsuited for the propagation of the species. Blue gum trees in Gundanshola continue to thrive well. The planting of pine in Gundar valley was continued. Fifty-four thousand one hundred and ninty-six seedlings in Gundar valley and 10,000 in Vandaravu hill were planted out. Over two hundred and fifty-six thousand seedlings of different

varieties of pine and other exotics, were raised and 1,70,000 basketted. During the year some seedlings were planted without being basketted. The results are reported to be promising. In order to test the results of planting by different methods, six small blocks were planted, each block consisting of one species in lines of basketted and unbasketted seedlings, in pits of 18 inches and nine inches, and in holes made by mamoties and crowbars. Seeds of six species recommended to be tried in the plantation with a view to ascertain which could be propagated most successfully and economically, were received from different provinces. *Tinnevelly.*—Four hundred Odina Wodier cuttings were planted in Kudiramoliteri reserve and about 25 per cent. have struck root. In the Ambasamudram range, planting of teak in the areas kumaried was continued by kanis.

20. *Cultural operations—North Vellore.*—The operations carried out in Panamadangi reserve were again successful. Amerdi plantation has been found to be a very promising locality for cultural operations. The useless species now on the ground will gradually be got rid of and the area planted up with valuable species. *South Vellore.*—Seeds of valuable species were dibbled in blank areas and felled coupes but the results were, as usual, a complete failure on account of drought. *South Arcot.*—Seeds of miscellaneous species were sown over an area of 611 acres. Seeds germinated during the monsoons but the seedlings could not stand the hot weather. *North Salem.*—Patch sowings of Sandal in Nagaramalai were moderately successful. The surviving plants are reported to be healthy and about a foot high. *South Salem.*—The usual operations were continued and the results were partly successful. The result of sowing Sandal seed on the Upper slopes of the Shevaroys is reported to be unsatisfactory owing to the failure of timely rain. *Trichinopoly.*—Sowing of *Sesbania aculeata* seeds in the Cauvery and Coleroon padugais was very successful. Eighty measures of seed were harvested. *Madura.*—Twenty-one and a half measures of *Sesbania aculeata* seeds were sown over an area of 12·70 acres at a cost of Rs. 106-13-6. Three hundred and fifty measures of seeds were harvested and delivered to the Agricultural Department for sale. *Tinnevelly.*—Three thousand two hundred and seventeen measures of seeds of different species were sown broad cast in felled coupes at a cost of Rs. 316. Germination was satisfactory but the seedlings withered in the hot weather. Four thousand palmyra nuts were put out in the Kudiramoli teri reserve and about 5 per cent. germinated. The Conservator is of opinion that the unsatisfactory results are generally due to the fact that the seed is put down too late. All seed dibbled in blank areas and in felled coupes should be put into the ground *before* the monsoon has begun.

(*c*) *Operations for improvement of growing stock.*

21. In all districts, creepers and climbers affecting standards in all the felled coupes were as usual, cut and removed by subordinates. Bamboo clumps were thinned in South Arcot. In Tinnevelly, the operation was not carried out during the year.

(*d*) *Experiments.*

22. *Acacia auriculiformis.*—In North Vellore, the species is thriving well in spite of the drought.

Acacia Saligna.—South Salem.—About 200 plants were raised and transplanted in three rest-house compounds. The experiment is a failure as only three plants which do not appear to be healthy, survive.

Dalbergia sissoo—South Arcot.—This species is reported to be doing well in Salavady reserve.

Hardwickia binata.—In North Vellore, this species continues to thrive well. In Tinnevelly, the trees planted about twenty years ago seeded and some seedlings are reported to have come up. One pound of seed was obtained from Coimbatore and sown in nurseries but there was no germination.

Pterocarpus santalinus—(Red sanders)—*North Vellore.*—This species is doing well in Amerdi plantation but the seedlings transplanted in Chenur and Palamady plantations are not vigorous on account of continued drought. *South Vellore.*—Fifty per cent. of the seedlings transplanted in Mudani and Tenmalai reserves are surviving.

Rhodes grass—South Salem.—Seed obtained from Australia was sown in the Harur bungalow compound. It thrived so long as it was watered and died out when watering was stopped.

Rosewood.—Introduced into Amerdi is doing well.

Swietenia macrophylla—North Vellore.—This species was introduced into four plantations. The plants are reported to be doing well. *South Arcot.*—During the year a quarter of a pound of seed was sown in the Melakondalavady reserve. Germination was good. Two hundred seedlings are reported to be doing well. The old plants aggregating about 150 planted many years ago continue to thrive well.

Swietenia Mahagoni - North Vellore.—This species put down in several plantations in the district is reported to be doing well. *South Vellore.*—Half the number of seedlings transplanted in Mudani and Tenmalai reserves are surviving. *South Salem.*—About 100 seedlings were raised and transplanted in three different places. The plants at Chitteri rest-house compound are reported to be about 8 feet high and thriving. But those put down at Harur died probably due to want of care and those at Salem though alive are unhealthy, the soil and climate being unsuitable. *Madura.*—The trees in front of the bathing mantapam in the Alagar hill reserve and in the compound of the Kanavoipatty rest-house continue to thrive.

5. Exploitation.

(*a*) *System of Management.*

(i) Major Forest Produce.

23. The total area of forests under Working Plans is 2,653 square miles. The various sylvicultural systems in force over this area are shown in the following table :—

	Area in square miles.	Percentage of total area under each sylvicultural system.
Clear fellings	1	·04
Simple coppice	183	6·90
Selection fellings	54	2·03
Coppice with standards	1,171	44·14
Improvement fellings	431	16·25
Pastoral method	42	1·58
Forests for which working plans have been prepared but not subjected to any definite working	771	29·06
Total ...	2,653	100·00

(1) *Clear or Regeneration Fellings* & (2) *Selection Fellings.*

24. *Clear or regeneration fellings.*—Nine coupes of 405 acres in the Coast Casuarina plantations in South Arcot and two coupes of 45 acres in Trichinopoly were clear felled by contractors. In Tinnevelly, one coupe in Milavittan reserve handed over to the Tuticorin municipality for a burial ground, was clear felled.

Selection fellings.—In North Vellore selection fellings were carried out in one fuel coupe and eleven bamboo coupes. Bamboo coupes in South Vellore, South Arcot, North and South Salem, a fuel coupe in Vettangudi Working Circle in Trichinopoly and two timber coupes in Cumbum Range, Madura district, were worked under this system. Sandalwood was extracted departmentally in South Vellore, North and South Salem and Trichinopoly, and timber for supply to Remount Depot was felled departmentally in North Salem.

(3) & (4) *Improvement and Coppice Fellings.*

25. *Improvement fellings.*—Three coupes of 284 acres in North Vellore and two timber coupes in South Vellore were worked under improvement fellings.

Coppice with standards.—The following coupes and tank-beds were felled under coppice with standards: Thirty-two fuel coupes of 2,139 acres in North Vellore, 37 of 4,513 acres in South Vellore, 54 of 4,524 acres in South Arcot, 35 of 1728 acres in Trichinopoly, 50 of 4,086 acres, three unreserve coupes and seven tank beds in Madura, 21 coupes of 1,535 acres and 14 tank-beds in Tinnevelly, 17 coupes of 2,108 acres in North Salem and 45 coupes of 3,932 acres in South Salem.

Coppice without standards.—Four coupes of 423 acres were felled in North Vellore.

(5) *Unregulated Fellings.*

26. In North and South Vellore, South Arcot and South Salem, unregulated fellings under the permit system were confined to unreserves. In the reserves of Kodaikānal and Tandigudi Ranges of Madura district, selected and marked timber trees were sold on permits for domestic requirements.

(ii) MINOR FOREST PRODUCE.

(1) *Miscellaneous Produce.*

27. Minor forest produce was, as usual, leased out. Permits were issued for manure leaves and stones in North and South Vellore, South Arcot, South Salem and Trichinopoly and for thatch grass, stones, earth and thorns in Madura. In Trichinopoly, 219 maunds of Divi Divi pods were collected departmentally. In Tinnevelly, small quantities of cardamoms, dammer and horns were collected departmentally at a cost of Rs. 60-5-7. The produce was sold for Rs. 141-12-0 resulting in a net profit of Rs. 81-6-5.

(2) *Extraction of Fodder.*

28. In North Vellore, the concession of free removal of grass from all reserves was largely availed of and 189,531 headloads valued at Rs. 2,961 were removed. In South Arcot, such removal was permitted in all coupes closed to grazing but only 29 tons valued at Rs. 72 were removed in one range. In North Salem, three closed reserves and Nagaramalai specially protected block were leased out for removal of grass. In South Salem and Trichinopoly, there were no free removals. In Madura, permits were, as usual, issued and in Tinnevelly, grass was, as in previous years, included in minor produce leases.

(3) *Hay-making.*

29. As in the previous year, Banavaram reserve in North Vellore division was leased out to the Military department on payment of royalty of Rs. 2 per ton on hay removed and a sum of Rs. 98 was realized. The poor outturn is attributed to heavy illicit grazing and drought. In South Salem, 720 maunds of hay was collected from burnt and unburnt plots in the Harur specially protected block at a cost of Rs. 10-8-0 and sold for Rs. 29-10-0.

(4) *Grazing.*

30. The revenue derived from grazing was Rs. 2,05,053 against Rs. 2,18,586 in the previous year, a decrease of Rs. 13,533 or 6·2 per cent. The decrease was due chiefly to closure of reserves to goat browsing in North Vellore and Madura districts.

(*b*) *Agency of Exploitation.*

(i) DEPARTMENTAL AGENCY.

31. The contract system being generally in force, the quantity of timber and fuel, the number of bamboos, and the value of minor produce extracted departmentally were respectively 1·11, ·03 and ·16 per cent. of the total outturn. Transport was, as usual, done by country carts.

Timber —10,930 cubic feet. Decrease was due in North Salem to smaller quantity supplied to the Remount depot and in Tinnevelly to no departmental removals of timber left in reserves by contractors.

Fuel —289,841 cubic feet due to the introduction of contract system in all the districts.

Bamboos +1,529 due to larger number of bamboos felled in South Arcot and Tinnevelly for departmental works.

Minor produce + Rs. 273 calls for no remarks.

(ii) BY PURCHASERS.

32. *Timber* —18,358 cubic feet. Due to fewer sales of trees on darkhast lands especially in South Arcot district.

Fuel + 310,328 cubic feet. Due to larger number of coupes worked in South Salem and Madura.

Bamboos +8,099,538. Due chiefly to larger yield from coupes leased in North Vellore and to larger areas worked in South Salem consequent on the change of rotation from five to three years.

Minor produce —Rs. 78,778. Due to fall in the amount of grazing revenue on account of closure of areas to browsing in North Vellore and Madura, free removal of metal by Local Fund contractors, and fall in the lease amounts for miscellaneous leases In North Salem, a major portion of the lease amounts, under a two year lease, was collected in the previous year.

(iii) RIGHTS AND PRIVILEGES.

33. The only privileges allowed were, as usual, for grazing at reduced rates in North and South Vellore and removal of thatch grass to the value of Rs. 50 in South Arcot. Tapping of patta palmyras in reserves is allowed in Tinnevelly, the rent being Rs. 2,339 against Rs. 740 in the previous year. The increase is due to collection of arrears of previous years.

(iv) FREE GRANTS.

34. The estimated value of free grants was Rs. 9,425 against Rs. 16,250 in the previous year. The decrease was chiefly due to the fall in the value of grass removed free in North Vellore and to the supply of a very small quantity of twigs, etc., in Trichinopoly for building korambus.

35. The quantity and estimated value of produce removed by right-holders and free grantees are shown in the following abstract :—

—	Timber.		Fuel.		Bamboos.		Grass and grazing.	Other minor produce.	Total value.
	Cubic feet.	Value.	Cubic feet.	Value.	Number.	Value.	Value.	Value.	
		Rs.		Rs.		Rs.	Rs.	Rs.	Rs.
Right-holders	..	..	..	..	..	..		2,389	2,389
Free grantees	47,810	5,322	26,689	380	6,568	46	3,502	175	9,425
Grants at reduced rates ..	..	..	..	..		..	1,911	..	1,911
Total ..	47,810	5,322	26,689	380	6,568	46	5,413	2,564	13,725

(c) Outturn and Sources of Forest Produce.

36. The total outturn is given in the following abstract :—

Agency of exploitation.	Timber including sandalwood in cubic feet.		Fuel in cubic feet.		Bamboos in number.		Minor produce including grass and grazing in rupees.	
	1912-1913.	1913-1914.	1912-1913	1913-1914.	1912-1913.	1913-1914.	1912-1913.	1913-1914.
1	2	3	4	5	6	7	8	9
							Rs.	Rs.
By Government agency.	32,535	21,605	354,048	64,207	4,282	5,811	433	706
By purchasers ..	983,229	964,871	6,259 365	6,579,693	12,660,892	20,760,430	5,07,871	4,29,093
By right-holders ..	..	..	20	..	..	..	820	2,389
By free grantees ..	32,276	47,810	104,301	26,689	26,441	6,568	10,316	3,677
Total ..	1,048,040	1,034,286	6,717,734	6,670,589	12,691,615	20,772 809	5,19,440	4,35,865

The variations have already been explained. The rates for grazing fees levied in the several districts are shown in form No. 74. The number of animals licensed on payment is 1,282,494 against 1,310,508 in the previous year.

CHAPTER III.—FINANCIAL RESULTS.

37. The revenue and expenditure of the year are compared with those of the previous year and the average of the preceding quinquennium in the following abstract:—

——	1913-14.	1912-13.	Average of preceding five years.
	Rs.	Rs.	Rs
Revenue	13,01,343	14,08,192	13,73,984
A. Conservancy and works including refunds.	2,79,752	2,88,401	4,25,429
B. Establishment	3,77,947	3,61,052	3,38,417
Total Expenditure ..	6,57,699	6,49,453	7,63,846
Surplus	6,43,644	7,58,739	6,10,138

Compared with the previous year, there was a decrease of Rs. 1,06,849 under revenue and an increase of Rs. 8,246 under expenditure. Fifty-seven per cent of the total revenue was derived from major produce, 34 per cent. from minor produce and 9 per cent. from miscellaneous sources. Of the expenditure, 44·8 per cent. was devoted to the upkeep and improvement of the forests, 11·3 per cent. to exploitation and 43·9 per cent. to miscellaneous items. The proportion of net to gross revenue fell from 53·9 per cent. to 49·5 per cent. The outstanding revenue at the close of the year was Rs. 2,89,897, of which Rs. 24,535 fell due within the year. The estimated value of timber and other produce at the sale depot at the close of the year was Rs. 78,409 against Rs. 29,845 at the commencement of the year, showing an increase of Rs. 48,564.

Receipts.

(i) *By Departmental Agency.*

Timber +Rs. 449. Due to disposal during the year, of wood from Pudupalayam depot in South Vellore.

Fuel—Rs. 35,531. Due to cessation of departmental fuel operations in all the districts.

Bamboos—Rs. 113. Calls for no remarks.

Sandalwood—Rs. 78,106. Due to non-disposal of about 110 tons of sandalwood on account of low prices offered.

Minor produce—Rs. 184. Calls for no remarks.

(ii) *By Purchasers.*

Timber—Rs. 10,974. Due chiefly in South Vellore to less collection of value of trees on darkhast lands, and in Madura, to non-sale of timber coupes during the current year.

	Rs.	
Fuel	+31,977	Due to reasons explained in paragraph 32 *supra*.
Bamboos	+13,238	
Grazing	—13,533	
Minor produce	—4,388	

(iii) *Miscellaneous (including confiscated drift and waifwood).*

Revenue — Rs. 9,684. Due to lower amount of compounding fees levied.

Expenditure.

A.—Conservancy and Works.

The expenditure was less than that of the previous year by Rs. 8,649. The decrease was due chiefly to the cessation of departmental felling of fuel and to less expenditure on sowing and planting, consequent on the disafforestation of Coast Casuarina plantations.

B.—Establishment.

The expenditure exceeded that of the previous year by Rs. 16,895. The increase was chiefly due to the promotion of the Conservator to second grade, posting of a Deputy Conservator as Special Working Plans Officer, entertainment of additional number of Deputy Rangers sanctioned during the year, and improvement of pay of Range clerks.

CHAPTER IV.—ADMINISTRATION.

38. *Circle charge.*—Mr. J. S. Battie held charge of the circle throughout the year.

During the year Mr. C. C. Wilson, Deputy Conservator of Forests, was posted to this circle as Special Working-plans Officer. He is engaged on the preparation of working plans for the sandalwood areas in North Arcot and Salem districts.

New ranges—North Salem.—The formation of the new Cauvery range approved in Government Order No. 1046, Revenue, dated 8th April 1913, was given effect to from 1st August 1913.

South Salem.—Proposals for dividing Harur North and South ranges into three range charges were submitted to Board during the year. In South Vellore, the formation of a new range on the Javadi plateau is under consideration and in Madura the reserves in Kodaikānal and Tandigudi ranges were redistributed and the head-quarters of the latter range moved to Palni.

Establishment.—During the year eleven additional Deputy Rangers were sanctioned for the circle. The pay of the range clerical establishment was improved. Rangers S. V. Devadasan and R. Cornwell were promoted to Extra Assistant Conservators' class on probation, the former being transferred to the Central Circle. The question of the further reduction of temporary establishment is under correspondence.

39. *Work of superior officers.*—The following remarks have been made by Collectors :—

North and South Vellore—By Mr. P. C. Dutt.—"I have been here for too short a period to enable me to make any useful comments on the work of the District Forest Officers."

South Arcot—By Mr. Aziz-ud-din Sahib.—"Mr. A. B. Myers worked fairly well." "M.R.Ry. Sadasiva Ayyar Avargal, B.A., has been doing very satisfactory work bringing to light the corruption of the forest subordinates."

Salem—By Mr. J. P. Bedford, North.—"Change of officers has made the year a difficult one, and my absence on privilege leave during a part of the year resulted in a gap in my own observations. Both Mr. McCarthy and Mr. Latham have worked with vigour and devotion to duty. The results of a sound forest policy are not immediately apparent and cannot be fairly indicated by statistics." "Probationary Extra Assistant Conservator Mr P. Venkataramana Ayyar was working in the district from 25th February to 25th May 1914. He made a valuation survey for the Aiyur-Anabiddahalla forests and submitted a report about Berikai Estate forests for the Court of Wards which is a most useful document."

South—"Mr. E. C. M. Mascarenhas has been District Forest Officer from 1st July 1913 to 30th June 1914. He has continued to discharge his duties in a careful and conscientious manner. He has recently done some hard work in regard to the formation of village Panchayats in the Uttangarai taluk and I hope the result will repay the trouble taken."

Trichinopoly—By Mr. L. Vibert.—"As I joined the district only in January 1914, I can speak personally only with regard to Messrs. Latham and Myers. Mr. Latham was hampered by ill-health and also by a bad office. After Mr. Myers' arrival drastic changes were made in the office establishment and I anticipate a great improvement in that respect now. Mr. Myers himself has worked hard to improve matters and is a zealous and industrious officer."

Tanjore—By Mr. R. B. Wood.—"I have scarcely seen anything personally of Mr. Myers or of his work in this district."

Tinnevelly—By Mr. C. G. Todhunter.—" Mr. Peake never spared himself. He continues to find difficulty in bringing his office up to date."

The Conservator would add that Mr. Scot has done very good work in Madura.

40. The conduct of Rangers on the whole was fairly satisfactory but that of Deputy Rangers, with a few exceptions, continued to be unsatisfactory. In North Vellore, one Ranger was dismissed but was reinstated by the Board on appeal. He has since resigned. One Deputy Ranger was suspended for disobedience of orders and absence without leave. In South Vellore, a Deputy Ranger was suspended for two months for absence without leave. In South Arcot, two Rangers were suspended pending investigation of charges brought against them and another was reduced to a lower grade for three months for unsatisfactory work. In North Salem, a sixth-grade Ranger was reduced to the Deputy Ranger's class for incompetence. In South Salem, the services of a probationary Deputy Ranger were terminated. One Deputy Ranger in Trichinopoly resigned. In Madura, the Ranger referred to in the previous year's report as under supension was dismissed after re-enquiry ordered by the Board. One acting Ranger was suspended for allowing illicit fellings on a large scale. The services of a probationary Deputy Ranger were terminated and another probationary Deputy Ranger resigned.

41. *Protective staff.*—The conduct of the protective staff continues to be unsatisfactory. In South Arcot, it was found by the District Forest Officer that the protective establishment in two ranges, from the Range officer downwards, was conniving at illicit browsing of goats. In the districts, 3 Foresters, 38 Forest guards and 192 watchers were dismissed or removed from service ; 7 Foresters, 54 Forest guards and 138 watchers were suspended and 4 Foresters and 5 Forest guards reduced.

42. *Ministerial establishment.*—Work was generally satisfactory in all offices except Trichinopoly. In North Vellore, competent men were selected for Head Clerk and Accountants' posts and work has improved. In Trichinopoly, the office was found to be in a chaotic state. One clerk was dismissed, another suspended and reduced, and two transferred to the Revenue Department. From Tinnevelly, it is reported, that on the whole the work is better and more punctually done. In South Salem, one Range clerk was dismissed for neglect of duty.

43. *Health of establishment and casualties.*—The health of the establishment was fair in all districts except on the Javadis in North and South Vellore and on the Pachamalais and Kollimalais in Trichinopoly. Two Forest guards and four watchers died.

44. *Relations between Revenue and Forest officers* continued to be cordial throughout the circle and no complaints were received.

45. *Service books* are reported to have been maintained and verified in all the districts.

46. *Conservator's inspections.*—Two hundred and four days were spent in camp. All the districts were visited and all the District Forest offices inspected.

47. *Touring of District Forest Officers.*—All the District Forest Officers spent more than six months in camp.

48. *Inspection of Range offices.*—All the Range offices were inspected during the year.

49. *Audit of accounts of District Forest offices.*—The accounts of all the District Forest offices were audited by the Assistant Inspectors of Local Fund Branch of the Accountant-General's office and the results were reported to be generally satisfactory.

50. *Imperial Forest College, Dehra Dun.*—One probationer for the Provincial service was under preliminary training in Madura district and has since been deputed to the college. Two probationers on return from the college were posted to this circle.

51. *Madras Forest College, Coimbatore.*—Three Rangers and three Deputy Rangers returned to the circle after training, one with Honours certificate, four with Higher Standard certificates and the remaining one with Lower Standard certificate.

Of the four candidates deputed for 1913–15 course, one probationary Ranger was removed from the college for absence without leave. Two Rangers, three Deputy Rangers and two private candidates have since been deputed for 1914–16 course.

52. *Vernacular Training School.*—The third session of the school was held at Cumbum. Twenty-four students were trained. The educational qualifications of a number of the guards deputed were reported to be insufficient to enable them to gain the fullest advantage of the course of training but all gained much experience in practical work. The District Forest Officer, Madura, who examined the students at the end of the course was, it is reported, satisfied with the result. Four students obtained first-class certificates, eight second-class and the remaining twelve third-class. Ranger M. Pakiyanathan acted as Instructor and acting Ranger Kesavalu Nayudu as Assistant Instructor, and both are reported to have carried out their duties satisfactorily.

CHAPTER V.—GENERAL.

53. *Realization of revenue from the usufruct of toddy-yielding trees.*—The revenue realised was Rs. 10,251 against Rs. 11,513 in the previous year. The fixed fee system continued to be in force. In South Salem, usufruct of trees not taken up under the fixed fee system was, as usual, leased and the amount realized was Rs. 3,162 against Rs. 2,560 in the previous year.

54. *Measures adopted to encourage the growth of manure-leaf-yieding trees and shrubs.*—The experiments conducted in Trichinopoly and Madura districts for the cultivation of *Sesbania aculeata* for production of seed are referred to in paragraph 20 *supra*. From South Vellore, it is reported that there is no demand for seed and that it is proposed to distribute the same to ryots free. In South Arcot, frequent agricultural meetings were held in one division and the advantages of growing shrubs yielding green leaf manure were infused into the minds of the ryot population. Agricultural pamphlets were distributed and ryots were advised to grow manure leaf shrubs on waste lands applied for assignment on darkhast. So far, the ryots have not taken any steps in this direction. In North Salem, an area of fifty acres of Giddamangalam manure-leaf farm, referred to in the previous year's report, was leased. As in the previous year the ryots in South Salem division did not avail themselves of the concession of taking lands on cowle tenure for cultivation of leaf manure.

55. *Grant of cowles for the formation of casuarina plantations in sandy areas.*—No applications were received.

56. *Cultivation in reserved forests.*—Leases of the previous years were renewed in South Vellore, North and South Salem. In South Arcot, the question of leasing a few areas in the Cuddalore range for cultivation under cowle tenure with a view to stock the areas with cashew trees is under consideration. In North Salem, arrangements are being made to set apart 75 acres of land in Natrapalaiyam reserve for a village site and cultivable land for fifteen families. In the Lower Palnis of Madura, survey of the areas under cardamom and coffee cultivation in connection with the investigation of the reserves by the Special Deputy Collector has brought to light numerous cases of encroachment and unauthorized cultivation. Sanction of the Board was obtained during the year to deal with all such cases on their merits, *i.e.*, by granting leases for lands on which valuable crops have been established and eviction in other cases.

57. *Improvement of water-supply in State forests.*—In North Vellore, bunding of three streams was carried out at a cost of Rs. 416 and five wells were repaired. In South Arcot, there are 26 kulams (tanks) in the reserved forests mostly useful for drinking purposes for cattle. A sum of Rs. 3,646 is reported to have been spent between 1902 and 1912 in maintaining these tanks. In North Salem, a water-trough for watering cattle was constructed at a cost of Rs. 25 in the Ubbarani reserve of Anchetti range.

58. *Supply of forest produce to meet the wants of the people.*—In all the districts, the contract system is in force and the contractors have generally been bound down to supply the wants of the people at fixed or reasonable rates. In North Vellore, permits were, as usual, issued for manure leaves and free removal of grass was allowed. The Collector considers that the removal of manure leaves should be

restricted as the effect on the growth is disastrous from a forest point of view. In North Salem, steps are being taken to provide for the wants of the people living near the forests which are not under working plans. In South Salem, six village depôts supply the wants of the agricultural population. The residents of Salem town memorialized the Government regarding the rise of prices of fuel and suggested certain remedies. The matter was enquired into and the Government in their Order No. 3146, Revenue, dated 31st October 1913, declined to take action in the manner suggested in the memorial. During the year exhaustive enquiries were made regarding fuel supply to Madura town and a report was submitted to Government. In this connection a revision of the working plans especially of Palamedu range will be taken in hand shortly. In Tinnevelly, permits are issued for felling babul trees in tank beds for agricultural implements.

59. *Sale of fuel at the edge of the forests.*—This is generally done by coupe contractors. In South Vellore, five tons of charcoal were disposed of at the edge of the forests.

60. *Arrangements made for the transfer of sale depots to private agency.*—The contract system is now established in all the districts of the Circle and the contractors have opened depots in all the important towns. In Trichinopoly only, three coupes were partly worked departmentally for supplying Turaiyur depot. This depot has since been closed.

61. *Free removal of grass.*—This has already been referred to in paragraph 28 *supra* From North Vellore, it is reported that the concession was largely availed of by the ryots of all the villages adjoining the forests. There were a few cases of abuse of the privilege and heavy compounding fees were levied. In South Vellore, free removal was permitted up to the beginning of the fire season.

62. *Hill tribes.*—The Malayalees living on the Javadi Hills and the Yelagiris in North and South Vellore were allowed grazing at half rates in return for their services in preventing forest fires and assisting the forest subordinates in the protection of the forests. They are reported to have carried out their obligations satisfactorily. The system of raising or reducing the privileged rates for observance or non-observance of the obligations was continued. From Trichinopoly, it is reported that the Malayalees on the Kollimalais assisted considerably in protecting the forests from fire and that they were given the concession of punakad cultivation. In the Conservator's opinion this is a mistake. Punakad cultivation should be stamped out and if the Malayalees have assisted the forest subordinates in the protection of the forests, they should be rewarded in some other manner. Deserving Malayalees were appointed as forest guards and watchers. In Tinnevelly, arrangements were made for the settlement of 15 families of Paliyars over an area of 50 acres on condition that they undertake to protect a large area of reserved forests from fire for a lump sum reward of Rs. 50. Ten families of Kanis established at Kariar in Ambasamudram range, planted during the year seven acres with teak seedlings and looked after the seedlings planted in the previous year. They have cleared five acres for planting next year. The departmental collection of minor produce referred to in the previous year's report was not a failure, though not altogether successful. No information has been furnished in the report of North Salem regarding the protection of Sannyasimalai reserve, but the Conservator believes that the reserve was again successfully protected.

63. *Prospecting licenses.*—No license was granted during the year.

64. *Timber and Sandalwood Transit Rules.*—The rules worked satisfactorily. In North Salem, a quantity of 409½ maunds of sandalwood was seized on suspicion. The matter is under enquiry. In North Vellore, an application for registration of property mark was refused as no satisfactory proof was produced in support of the genuineness of the application.

65. *Rules under section* 26 *of the Forest Act.*—The rules generally worked satisfactorily and no complaints were brought to notice. From North Salem, it is reported that the privilege was abused to a great extent, the reason being the increased temptation on the part of the villagers to illicit removal and sale owing to rise in the prices of fuel which could not be efficiently checked by the village officers or forest subordinates who have more pressing and important duties to attend to.

Rules for the pursuit of game on the Palni Hills were sanctioned during the year.

66. *Rules regarding levy of composition fees.*—Attention was paid to the rules in fixing the amount of composition fees.

67. *Arrangements made in holding the villagers adjacent to particular forests responsible for protection of those forests by dividing the village and blocks of forests concerned—North Salem.*—On account of increase in the number of offences in spite of warning published in the previous year, four reserves were closed to grazing temporarily in November 1913. This notice was however withdrawn in January 1914 and another warning given that unless there was a satisfactory diminution in forest crimes the question of again closing the reserves would be taken into consideration. There has been no diminution in the number of offences.

Live and Dead Stock.

68. *Live-stock.*—There was no live-stock in the circle, the two bulls kept in North Vellore division having been disposed of.

69. *Inventory of valuable stock.*—Stock registers are reported to have been maintained in all districts and verified at inspections.

70. *Rain-gauges.*—In all districts readings are recorded. From North Salem, it is reported that the readings, having been badly recorded, are useless. Two new stations were opened in South Salem.

71. *Specimens—North Vellore.*—Wood specimens of rain tree were sent to the Gass Forest Museum, Coimbatore. Specimens of timber of several species were sent to Mr. George Ellis in England. *Tinnevelly.*—Some earth snakes were again this year sent to Mr. George E. Mason.

Suits.

72. *North Vellore.*—A suit instituted by one Sadasiva Rao in respect of survey No. 18 of Vandrantangal village included in Panamadangi reserve was decided in favour of Government. *South Vellore.*—The suit of P. Danakoti Pillai referred to in the previous year's report was compromised on payment of Rs. 792-11-6. *South Arcot.*—The Civil suit against Ranger B. T. Sitarama Ayyar and two subordinates instituted in the previous year has not yet been disposed of. *Trichinopoly.*—The suit instituted by N. Subbarama Ayyar, late depot-keeper was decided against Government. During the year, one Arunachala Reddi has filed a suit in the court of the Subordinate Judge of Trichinopoly, claiming damages amounting to Rs. 6,000 in the matter of forfeiture to Government of the produce felled by him in three tank beds for breach of the conditions of his contract. *Tinnevelly.*—In the Chinnakadu Hill suit, the appeal was decided in favour of Government. The party in Kuttalam water-fall suit has appealed to the Privy Council and records have been sent.

73. *Forest Committee's report.*—All the reserves in the North Vellore division and 28 reserves in the South Salem division have been classified and the classification has been approved by the Board. The reserves in Tanjore district have also been classified and the classification awaits the approval of the Board. In the other districts the subject is receiving attention.

The patrol system has been introduced in North Vellore and South Arcot, in two ranges of South Salem division and in the Ghat forests of Tinnevelly district and will be further extended next year.

The other suggestions made in the Committee's report are also receiving attention.

Trichinopoly,
12*th September* 1914.

J. S. BATTIE,
Conservator of Forests, Southern Circle.

INDEX.

FOREST ADMINISTRATION REPORT,

MADRAS PRESIDENCY,

WESTERN CIRCLE, 1913-1914.

Chapter.	Subject.	Paras.
	Introduction—	
	Summary of progress during the five years 1909-1910 to 1913-1914	1 to 18
I	Constitution of State forests—	
	1. Alteration in area	1
	2. Forest settlement	2
	3. Demarcation	3
	4. Forest surveys	4 to 6
II	Management of State forests—	
	1. Regulation of management—	
	(*a*) Preparation and control of regular working-plans ...	7
	(*b*) Preliminary working-plans reports	8
	(*c*) Annual plan of operations	9
	2. Communications and buildings—	
	(*a*) Roads and bridges	10
	(*b*) Buildings	11
	(*c*) Miscellaneous works	12
	3. Protection of forests—	
	(*a*) General protection	13 to 15
	(*b*) Protection from fire	16 to 18
	(*c*) Protection from cattle	19
	(*d*) Protection against injuries from natural causes ...	20
	4. Sylviculture—	
	(*a*) Natural reproduction	21
	(*b*) Artificial reproduction	22
	(*c*) Operations for improvement of the growing stock ...	23
	(*d*) Experiments	24 & 25
	5. Exploitation—	
	(*a*) System of management—	26
	(i) Major forest produce	27 to 30
	(ii) Minor forest produce	31 to 34
	(*b*) Agency of exploitation—	
	(i) Departmental agency	35 & 36
	(ii) By Purchasers	37
	(iii) Right-holders and (iv) Free grants	38
	(*c*) Outturn and sources of forest produce	39
III	Financial results	40
IV	Administration	41 to 55
V	General	56 to 67
	Appendices A to E and Forms Nos. 65 to 85.	

FOREST ADMINISTRATION REPORT OF THE WESTERN CIRCLE

FOR THE

FOREST YEAR ENDING 30TH JUNE 1914.

SUMMARY OF PROGRESS DURING THE FIVE YEARS 1909–1910 TO 1913–1914.

INTRODUCTION.

In conformity with the resolution issued by the Government of India in January 1912, the following summary of the progress made in Forest Administration of the Circle during the last quinquennium is prefixed to the annual report for 1913–14.

2. *Changes in area.*—The area under the control of the department has decreased from 4,448 to 4,251 square miles. The decrease was chiefly due to the adoption of surveyed figures and to excisions from reserved lands. The areas at the commencement and close of the quinquennium were as follow :—

	At commencement of the period.	At close of the period.
	SQ. MLS.	SQ. MLS.
Reserved forests	3,774	4,071
Reserved lands	548	53
Leased forests	31	31
Leased lands	95	96
Total ...	4,448	4,251

The proportion of forests to the total area was 23·7 per cent. against 24·8 per cent. at the commencement of the quinquennium. In addition to the above, 2·5 square miles of unreserved lands which are not shown in the returns of the department and certain unreserved lands containing sandal growth in *Coimbatore* were under the control of the department.

3. *Forest settlements.*—The area finally settled at the end of 1908–09 was 3,805 square miles and at the close of 1913–14, 4,102 square miles. The balance under settlement at the close of the quinquennium was 47 square miles ; the actual settlement of 44 square miles of this is completed. The original settlement of some of the forests in *Coimbatore* having been found defective, a Special Deputy Collector was appointed in 1909–10 to examine boundaries and enclosures and submit revised notifications. This officer completed the verification in 1912–13.

4. *Demarcation.*—The total length of artificially marked boundaries at the close of the year 1913–14 amounted to 8,056 miles while that at the commencement of the quinquennium was 8,035 miles. On account of the alterations necessitated by the verification of the special officer referred to in the preceding paragraph, there was a large reduction of 391 miles in the length of boundaries in *Kollegal* and *North Coimbatore.*

5. *Forest surveys.*—Two hundred and thirty-seven square miles were surveyed during the last five years. One hundred and thirty-nine square miles which were surveyed on the four inch scale were also resurveyed on the two inch scale. The

total of areas surveyed up to the end of 1913–14 was 4,028 square miles against 4,569 square miles at the end of 1908–09. The decrease was due to the adoption of the area given on the maps published by the Survey of India.

6. *Working plans.*—During the quinquennium working plans were sanctioned for eight square miles and compiled but not sanctioned for 52 square miles. The plans for 151 square miles are being revised. The areas under sanctioned working plans at the end of 1908–09 and at the close of 1913–14 were 1,690 and 1,614 square miles, respectively. The adoption of surveyed figures accounts for the apparent decrease. Working plans for 1,651 square miles have to be prepared and are not required for 934 square miles. The work of the general staff has increased so greatly, that until a special Working Plan branch is provided for the circle, better progress cannot be expected.

7. *Communications and Buildings.*—The average annual expenditure on communications, buildings and other works during the quinquennial period ending 30th June 1909 amounted to Rs. 45,141; whilst during the five years under review it was 89,524. The large increase was due chiefly to opening out forests for working, the total length of communications in charge of the department being about for 550 miles; to providing bungalows for inspection purposes and accommodation offices and staff, and to river-training work in the west coast districts to increase their floating power. Mr. Beadon Bryant in his note on Forest Revenue and Expenditure in Madras having suggested that the expenditure on communications and buildings might be placed under better control, a five year programme of proposed expenditure on new works is under preparation for the approval of Government.

8. *Forest offences.*—The number of offences reported has been on the increase. The average annual number during the period 1904–05 to 1908–09 was 2,448 whilst for the period under review it rose to 3,404. Offences of "injury to forests by fire" more than doubled. Illicit felling and grazing increased by 48 and 13 per cent., respectively; offences of a miscellaneous nature decreased by 5 per cent. The increase under unauthorized fellings was due chiefly to thefts of sandalwood.

9. *Fire protection.*—The average annual area under systematic protection during the preceding quinquennial period amounted to 759 square miles, the average of failures being 2·9 per cent.; the area was increased during the period under review to an average of 1,063 square miles the failures amounting to 5·5 per cent. The latter increase is due to better reporting of fires.

Areas under general protection are to be found in five divisions of the circle (*South Canara* and the four divisions of *Coimbatore*) and the registration of fires in them is very unreliable.

10. *Protection from cattle.*—The whole forest area is closed to goats. During the quinquennium under review the average area annually open to cattle other than goats was 3,399 square miles or 78 per cent. of the total forest area. The average number of animals permitted to graze on payment decreased from 3,65,719 in the previous quinquennium to 3,60,757 in the period under review. A grazing scheme for one of the taluks of *Coimbatore* was introduced and at first met with a mixed reception; some villages complained of the restrictions, while others appreciated them. A conference was held with the ryots; when it was found and generally admitted that there was no real grievance, and that the restrictions imposed by the scheme were for their own benefit.

11. *Yield and outturn.*—The following statement shows the average annual outturn of the forests for the five year periods ending 1908–09 and 1913–14.

—	Timber and fuel.	Bamboos.	Minor produce including grass and grazing. Value.
	C. FT.	NO.	RS.
1904–05 to 1908–09	3,713,811	2,581,445	1,63,586
1909–10 to 1913–14	4,265,983	4,924,260	1,49,182

The average annual outturn of timber and fuel and the number of bamboos extracted increased by 14·8 and 90·7 per cent. respectively, while the average value of minor produce exploited decreased by 8·8 per cent. chiefly under grazing.

12. *Financial results.*—The average annual financial results for the last two periods were as follow:—

—	Revenue.	Expenditure.	Deficit.
	Rs.	Rs.	Rs.
1904–05 to 1908–09	6,50,567	6,78,872	28,305
1909–10 to 1913–14	7,77,773	7,96,164	18,391

The revenue and expenditure increased by 19 and 17 per cent respectively. The net deficit decreased by 35 per cent. The circle worked at a loss for the first three years of the quinquennium under review but the financial position has been improved during the last two years. The net surplus being 11·5 and 5·9 per cent. of the gross revenue.

13. *Circle, District and Range charges.*—The size of the circle was reduced during 1911–12 by the transfer of Madura, Tinnevelly and Rāmnād districts to a new fourth circle which became the 'Southern Circle'; and this, the remains of the old 'Southern Circle' became the 'Western Circle'. The partition of the *South Canara* division and the formation of two extra ranges in *Kollegal* have had to be kept in abeyance for want of officers. Four extra ranges were formed during 1909–10.

14. *Administrative control.*—The general administration of the forests continued to be under the control of the Board of Revenue. During the period under review the Conservators of Forests in charge of the circle were—Mr. F. A. Lodge, C.I.E., from 1st July 1909 to 2nd February 1914 (except for a period of leave and special duty from 18th July to 17th November 1911, when Messrs. J. S. Battie and P. M. Lushington officiated) and Mr. C. D. McCarthy from 3rd February to 30th June 1914.

15. *Forest legislation.*—Nil.

16. *Organization.*—The system of incremental promotion was introduced for the officers of the Provincial Service from 1st April 1911. Revision of the range clerical establishments was sanctioned during 1910–11 and their pay has since been improved.

The permanent establishments of the circle employed at the close of the year consisted of one Conservator, three Deputy Conservators, two Assistant Conservators, six Extra Assistant Conservators, one Special Veterinary Inspector, 32 Rangers, 34 Deputy Rangers, 48 foresters, 285 forest guards, 91 clerks and 55 peons. In addition to the above, temporary establishments costing Rs. 7,628 per mensem are also employed.

17. *General principles.*—A few months before the close of the period under report, the Government of Madras issued their order on the Forest Committee's Report. The principal provisions of the order are that a considerable extent of reserves, lying in the neighbourhood of villages in populated zones, is to be treated only as grazing grounds, and the sole control over it is to be transferred to panchayat management; whilst in certain other reserves to be worked for fuel and timber, besides grazing, the distribution of the grazing possibility is to be left to the villagers themselves. The order involves a classification of the forests of all districts; but so far as transfer of control goes, it was decided to try the experiment first in selected divisions of the Presidency of which *Central Coimbatore* in this Circle is one, and accordingly certain reserves have just lately been handed over to the panchayats.

18. *Forest education.*—The Madras Forest College was established on 1st July 1912, and the first batch of trained students was turned out in March 1914 after nearly a two years' course.

For the training of foresters and guards, annual Vernacular Training schools with a six months' course have been established since 1909. There is one school per circle per annum, and it is located in different districts in turn. They are doing excellent work.

CHAPTER I.—CONSTITUTION OF STATE FORESTS.

1. Alteration in Area.

Reserved forests.—Two hundred and eighty-three square miles in *Kollegal* and some small areas aggregating two square miles in the other districts were transferred from reserved lands. On the other hand two small areas aggregating 135 acres were disafforested, and the adoption of survey figures resulted in a net decrease of three square miles. The total area increased from 3,820 to 4,102 square miles.

Reserved lands.—About three square miles consisting of extensions and absorption of enclosures in adjoining reserved forests were added and 285 square miles were transferred to reserved forests. The area at the close of the year was 149 square miles, of which 96 square miles are leased lands in *South Malabar* and the *Nilgiris* and five square miles Toda patta lands in the latter district.

2. Forest Settlement.

2. Four blocks in *South Canara*, three in *North Coimbatore*, two each in *Kollegal*, *Central* and *South Coimbatore* and one each in *North Malabar* and the *Nilgiris* were finally settled during the year. Twenty-five blocks aggregating three square miles were brought under settlement. The actual settlement of six out of the thirty-four blocks shown as balance under settlement was completed. The oldest of the pending blocks is the Silent Valley in *South Malabar*, but it has been finally notified, although reservation takes effect after the close of the year.

3. Demarcation.

3. Forty-six miles of new boundaries were demarcated during the year at a total cost of Rs. 1,293; while 116 miles of boundaries already completed were kept in repair at a cost of Rs. 2,997. One thousand and forty-seven miles of boundaries are reported to have been cleared or stone-lined free of cost by subordinates in all districts except *South Canara* and *North Malabar*. In *South Canara* the subordinates continued to clear the boundaries, but no record of the result was maintained and in *North Malabar* no such clearing was made. In *North* and *South Malabar*, 162 and 62 miles respectively were cleared as usual for the purpose of fire-protection, the cost being debited to A VIII (*f*). The Mysore and Cochin frontier boundaries adjoining *North Malabar* and *South Coimbatore* were demarcated and the cost was debited to "Political." The Mysore frontier boundary adjoining *Kollegal* was also verified. The survey and demarcation of a new boundary between the *Nilgiris* and *Central Coimbatore* divisions was delayed by the resignation of the first Ranger employed on it and the sickness of his successor. Practically nothing was done at the close of the year.

4. Forest Surveys.

(*a*) *By the Survey of India Party.*

4. No forest surveys were undertaken during the year.

(*b*) *By Departmental Survey.*

5. The timber and fuel coupes of the year in all districts except *South Malabar* and the *Nilgiris*, the traces for portions of three roads in *Kollegal* and one bridle-path in *Central Coimbatore* and the alignment of five miles of ghat and cart roads in *South Coimbatore* were surveyed departmentally. A special officer of the Madras Survey Department surveyed the estates on the Anamalais from November 1913 to end of May 1914. This survey has not been completed and will be continued next field season.

(*c*) *Maps.*

6. *Reference maps referred to in section 80 of the Forest Code.*—These are reported to have been maintained in all districts.

Special District Reference Maps—Preparation.—The Forest Map Officer prepared the maps of *Trichinopoly* cum *Tanjore*, *Chingleput*, *North Vellore*, *Chittoor* and parts of *Ganjām*, *Kistna* and *Nellore*. Progress has not been so good as was

expected. *Progress in publication.*—The maps of *Kollegal*, *Central* and *South Coimbatore* were published and those of *South Canara*, *North Coimbatore* and the *Nilgiris* were in the press in the Forest Map Office at Dehra Dun at the close of the year.

CHAPTER II.—MANAGEMENT OF STATE FORESTS.

1. Regulation of Management.

(*a*) *Preparation and Control of Regular Working Plans.*

7. *Preparation.*—A working plan for the forests of Kanoth range in *North Malabar* was prepared. The plan for the Eucalyptus plantations in the *Nilgiris* and the revised working plans for the forests of Mēttupālaiyam range and for Tadagam reserved forest referred to in the last year's report have not been sanctioned. These revised working plans and the plan for the forests of Erode range have been returned by the Board for further revision. Statistics for the revision of the plans for Coondapoor and Sankaranarayana ranges in *South Canara* and for Begur and Chedleth ranges in *North Malabar* and for preparation of a plan for the Gundal and Doddahalla valley bamboo working circles in *Kollegal* were collected. Mr. Hart, Extra Assistant Conservator, was posted on working plans duty in *South Canara* towards the end of the year for the preparation of a preliminary plan for the extraction of overmature timber in the reserves at the foot of the ghats. His work was interrupted by the advent of the monsoon and will be resumed in October.

Control.—The provisions of the existing working plans were adhered to with the following exceptions: *South Canara.*—Fresh schemes for extracting bamboos in Sankaranarayana range and for manufacturing catechu in the unreserved lands of Coondapoor range were sanctioned. The following coupes were not worked as the operations in previous years' coupes were not complete. Fuel coupes, Bakudi VII, X of Andar North and South, Narimogar II and Muliar III, Chinkramale IV and Durgamale V, were not worked for want of demand. Coupe III of Nerankimale bamboo working circle was worked instead of coupe II. *North Malabar.*—Owing to the impossibility of working the whole of coupe XVIII of Begur, only two out of the five sub-coupes and a small portion of the third were worked. But a considerable development in the exploitation of the plateau forests in this division is now in hand. *South Malabar.*—New sample plots were laid out in Ellenjeri and Moolathmanoo plantations. Felling in Edacode and clearing parasites in Edacode, Ramalur and Ellenjeri plantations were not completed owing to scarcity of labour. *Kollegal.*—Coupe VI of Araipalayam was not taken up as coupe V was not completed. The dislocation of works in Bailur and Madeswaranmalai sandalwood working circles continued owing to the mortality from spike disease in coupes VIII and X of the former and III and IV of the latter. The working plans for Talamalai in *North Coimbatore* and for Bolampatti (except Chinnar working circle) and Mēttupālaiyam ranges in *Central Coimbatore* remained as before in abeyance for want of demand. The prescriptions for working bamboos in the Sholakarai and Walayar working circles in *Central Coimbatore* were not adhered to as the result of flowering and seeding in previous years. The timber coupes in the tank beds of Erode range were felled including the coupes of last year. Hay was not manufactured as the forests were placed under the control of panchayats. *South Coimbatore*—Felling in the Varigali valley was suspended pending the construction of roads. Talinji working plan was set aside *sine die* as unworkable. The size and location of fuel coupes could not be adhered to owing to the impossibility of working the areas prescribed in the working plans.

(*b*) *Preliminary Working Plans Reports.*

8. *The Nilgiris.*—The improvement fellings in Mudumalai working circle were stopped, the previous stock remaining undisposed of. But there is every prospect at present of a resumption through the development of fresh markets. Three fuel coupes in *Kollegal* and nine fuel, eight bamboo, and four sandal coupes in *North Coimbatore* were as usual worked systematically. Materials were gathered for the preparation of a plan for the Minchiguli valley in *North Coimbatore.*

(*c*) *Annual Plan of Operations.*

9. The following were the important deviations apart from those mentioned already. *South Canara*—Three cart roads and two coupe roads were not constructed as funds were required for other works. The construction of a ramp in the Wandse river was postponed, pending the working results of the ramps previously constructed. Stone lining the boundaries of Chittur, Abbigudde and Harkur reserves was not taken up as similar work in five other forests was carried out. *South Malabar*—Serambi at Erambadam, Range Officer's quarters at Nedungayam and kitchen at Walghat were not constructed; the first as funds were required for more urgent works and the last two for want of labour. *Nilgiris*—The scheme for supply of water to Kargudi camp was not completed owing to difficulties connected with fixing the pump. *Kollegal*—Coupes V of Chickailur and Gundal and coupe XV of Hanur fuel working circles were not completed owing to contractors' failure in the first two and to a large stock of previous fellings remaining unsold in the last. Revetment walls on the Gundal valley road and subordinates' quarters at Gundal were not constructed and the Hanur reserve was not demarcated for want of establishment. The wells at Bandalli, Chickailur and Gundal and the rest-house at Ponnachi were not completed owing to scarcity of labour. The traces of Hanur—Cowdalli and Cowdalli-Hosur roads were not completed owing to late commencement. Construction of a godown at *Kollegal* was deferred pending acquisition of site. *North Coimbatore*—The following works were not taken up for want of establishment and funds:—Oshatti—Uginium road, tracing and estimating for Yekkattur-Markampalayam road, rest and out-houses at Oshatti and Jeergahalli, rest-house at Ullurtanda, demarcation of North Bargur and Pachapalimalai and dibbling seeds in Benneri and Vinnapalli fuel coupes. *Central Coimbatore*—Coupes VII of Kandiyur and Nayakkanpalayam were not worked for want of buyers. Construction of bridle-path from Chindakki to Havelock's bungalow was postponed owing to delay in preparation of plan and estimate, subordinates' quarters at Gopanari in favour of more important works, and subordinates' shed at Anaikatti pending settlement of the block. *South Coimbatore.*—Felling Tekadi coupe XXIV was not carried out owing to non-completion of work in coupe XIX. Bamboos were not extracted from Tunakadavu block II for want of demand Timber from Punachi working circle was not carted as it was sold in the forest Varigali valley road was not proceeded with pending further investigation. Shed for livestock at Tekadi and quarters for subordinates and elephant establishment at Ulandi were not constructed as they were not urgent. The project of constructing a dam at Talinji was abandoned. *Works carried out though not provided for in the Plan of Operations*—*South Malabar*—Construction of a bridle-path in the Silent Valley, a flood embankment at Kallai and a Serambi at Pulimunda and the reconstruction of the Nellikutta rest house. *North Coimbatore*—Charcoal burning in coupes I to III of Hassanur, extraction of dead and spiked sandal trees from coupes II and III of Talamalai and Hassanur, sinking wells at Attani and Kakayanur, demarcation of South Bargur and acquisition of enclosures in Palamalai and Talamalai reserves. *Central Coimbatore*—Portions of some of the fuel coupes left unworked in the previous year were felled. Construction of rest-houses at Chindakki and Agali continued, and the Range office at Iruttupallam was commenced. *South Coimbatore.*—Extension of a road to Manthorai and construction of kitchen to Manthorai rest-house, out-houses and subordinates' quarters at Attakatti, store room at Anamalai and camping sheds at Pundi and Talinji. The above works were necessary.

2. COMMUNICATIONS AND BUILDINGS.

(*a*) *Roads and Bridges.*

10. Rs. 23,180 were spent on new works, and Rs. 22,071 on repairs against Rs. 15,626 and Rs. 30,975 respectively in the previous year. The following were the important new works of the year.—*South Canara*—Construction of $4\frac{1}{2}$ miles of road for transport of fuel and $5\frac{5}{8}$ miles of Herur-Hulimeshepare road. *North Malabar* Extension of coupe road in Kanoth range for a distance of $3\frac{3}{4}$ miles and construction of one bridge on Kottiyur road. *South Malabar*—Construction of a bridle path in the Silent Valley. The *Nilgiris*—Construction of a cart-track and a bridle-path and completion of the first mile of the Kargudi road. *Kollegal*—

Construction of 5½ miles of Singanallur-Lingamankarai road. *North Coimbatore*—Completion of 7 miles of ghat and 3 miles of cart roads. *South Coimbatore*—Construction of the Aliar valley road and a road to Manthorai rest-house. The new Mount Stuart ghat road was traced and the plans and estimates are under preparation.

Tramways.—The Mount Stuart tramway in *South Coimbatore* was extended by 3 miles. The profit of Rs. 2,712 shown last year is reported to be incorrect and should be Rs. 9,349. The working of the year showed a net loss of Rs. 754. The outturn of work during the year fell considerably from 10,666 ton-miles to 2,105 ton-miles. All the Government bullocks were used in carting to depots the large quantity of timber trammed last year and good working bullocks could not be had for hire. Hence the short outturn. The working charges per ton-mile amounted to Rs. 2–10–2 against Rs. 0–13–11 in the previous year.

(*b*) *Buildings.*

11. The total expenditure on new buildings amounted to Rs. 27,776 and that on repairs to Rs. 12,114. The chief works executed during the year were—*Range offices.*—One in *Kollegal* was completed and one in *Central Coimbatore* commenced. *Range quarters*—Commencement of two in *South Canara* and construction of one in *North Coimbatore*—*Rest-houses.*—One in *South Malabar*, one in *Kollegal* commenced last year was nearing completion and one was in progress and three in *North Coimbatore*. *Serambis*—One in *North Malabar* and two in the *Nilgiris*. *Inspection sheds, store houses, etc.* One store house each in *North* and *South Coimbatore* and two inspection sheds in the latter district. *Deputy Ranger's quarters.*—One at Kaimaram was completed and seven others were commenced in *North Malabar*. *Subordinates' lines.*—One set at Bandyshola in the *Nilgiris* and one in *Central Coimbatore* and four sets in *North Coimbatore*. Two sets in *South Coimbatore* were commenced.

(*c*) *Miscellaneous Works.*

12. The chief works carried out were—Construction of permanent and temporary dams in *North Malabar* for increasing the floating capacity of two streams, and of a flood bank at Kallai in *South Malabar*. Sinking two wells in *South Malabar* and one in *Kollegal*. Eight wells in *North Coimbatore* were in progress. The total expenditure incurred was Rs. 10,198.

Telephone—continued to be useful.

3. Protection of Forests.

(*a*) *General Protection.*

13. The following table gives the number of offences reported during the year as compared with those of 1912–13 :—

Class.	Injury to forest by fire.		Unauthorised felling or appropriation of wood and minor forest produce.		Grazing without permission or in tract in which grazing is prohibited.		Other offences.		Total cases.	
	1912–13.	1913–14.	1912–13.	1913–14.	1912–13.	1913–14.	1912–13.	1913–14.	1912–13.	1913–14.
Reserved forests.										
Cases taken into court .	29	23	349	322	159	112	73	72	610	529
Cases compounded ..	49	61	1,428	1,483	622	454	161	190	2,260	2,188
Cases undetected ..	300	331	13	16	1	..	2	..	316	347
Total ..	378	415	1,790	1,821	782	566	236	262	3,186	3,064
Unreserved lands.										
Cases taken into court ..	2	2	76	66	..	..	4	8	82	76
Cases compounded ..	2	1	514	428	..	1	12	24	528	454
Cases undetected ..	1	..	7	5	..	..	1	..	9	5
Total ..	5	3	597	499	..	1	17	32	619	535
Grand Total ..	383	418	2,387	2,320	782	567	253	294	3,805	3,599

Offences in reserved forests.—The offences under "illicit grazing" decreased, while those under the other classes increased, the net decrease being 4 per cent. The decrease under "illicit grazing" is shared by all districts except the *Nilgiris* and *South Coimbatore*. *North Coimbatore* showed 58 per cent. but no explanation is given for the decrease. The increase under "injury by fire" was mainly in *Kollegal* and *North Coimbatore*, and was due to an exceptionally dry season. The increase under "illicit fellings" and "other offences" was mainly in *South Canara* and was due to the smuggling of sandalwood from kumaki lands under cover of warg permits.

Of the cases taken into court, the percentage of convictions obtained was 91 against 93 in the previous year and the number of withdrawn cases was one per cent. Where convictions were obtained, punishments are reported to be satisfactory in *South Canara*, adequate in *North Malabar* and lenient in one of the courts in *North Coimbatore* ; no comment is made in the other districts.

Cases compounded numbered 1,990 against 1,932 in the previous year, the compounding fees realized being Rs. 23,444 against Rs. 18,964. The increase was chiefly in *South Canara* due to increase in the number of cases detected and to heavier compounding fees in sandal cases, *South Coimbatore*. Two cases of felling trees were compounded for large amounts besides the collection of the value of timber.

Working of the rules for compounding grazing offences.—The rules worked satisfactorily in *Kollegal*, *Central* and *South Coimbatore* ; they were observed in *North Coimbatore* and not adopted in *South Canara* and *Malabar* as no necessity existed. In the *Nilgiris* the existing practice is in consonance with the rules.

There was an increase in the number of undetected offences, the percentage to the total number of offences being 11·3 against 9·9 in the previous year. Undetected cases were mostly fire occurrences which endangered forests.

Holding adjacent villages responsible for commission of offences in particular forests.—No special steps were taken in *South Canara* and *South Coimbatore* ; in the latter district the hill tribes were induced to protect the forests from fire. In *Kollegal* and *North Malabar* the notifications issued in previous years were in force. No fresh warnings were given in *North Coimbatore* as the offences did not increase. The system is not workable in the *Nilgiris* and is not required in *South Malabar*.

14. *Offences in unreserved lands.*—The offences of the year decreased by about 13 per cent. The particulars furnished by the Revenue Divisional Officers are still incomplete and no return has been furnished by one of the Divisional Officers of Coimbatore. Of the cases taken into court, ·9 per cent. ended in conviction. So far as particulars are furnished, the number of cases compounded and the fees realized were 432 and Rs. 12,349 respectively against 519 and Rs. 5,113 in the previous year, the increased fees were realized chiefly in *South Canara* from sandalwood thefts.

15. *Rewards.*—In *South Canara* one Ranger was granted a reward of Rs. 35 for having detected illicit felling and transport of sandalwood from Kumaki and unreserved lands, and two informers were granted Rs. 15. Rewards amounting to Rs. 7 were granted to informers in the *Nilgiris*. Two Deputy Rangers and five subordinates in *Kollegal* were granted rewards aggregating Rs. 78 for cases of illicit grazing. One Forester in *North Coimbatore* was rewarded Rs. 10 for detecting a case of illicit shooting. *Central Coimbatore*.—In three cases guards are reported to have been rewarded Rs. 10 each for detecting offences. In *North Malabar* the Uralan of Tirunelli temple was allowed the concession to graze the temple elephant free in the forests, for his assistance in fire protecting the Tirunelli valley.

(*b*) *Protection from Fire.*

16. *Special protection.*—There was no change in the system of protection. The area attempted to be protected was 1,129 square miles against 1,122 in the previous year, the increase being chiefly due to transfer of additional areas from general protection in *South Canara* and to extension of protection to Gundal and Doddahalla valley bamboo working circles in *Kollegal*. The percentage of area which escaped fire was 90·4 against 97·4 in the last year. The season was very dry and unfavourable in all

districts, and there has consequently been a reversion to the results of the year 1911–12. There was a fire of 30,000 acres in a specially protected block in *Kollegal*; but as the "special" protection afforded only consisted of one fire line and two fire patrols, the block should be transferred to the other head. Protection was bad in the *Nilgiris* and *North Malabar*. Here single fires of 16,000 and 7,000 acres are reported. It takes several days for a fire to cover such areas and as they die down daily between about midnight and 8 A.M. opportunities are afforded to a vigilant staff to cut them off by counterfiring In *North Malabar* the fire was the result of an escape during line burning and the services of the Deputy Ranger and Forester who were in charge were dispensed with; a guard was also dismissed. In *South Coimbatore* hillmen were induced to take up the protection of certain blocks on promise of reward. Although not quite successful the general result was satisfactory for a first attempt.

The cost of protection per square mile of area attempted was Rs. 26–3–6 against Rs. 23–7–6 in the previous year. The increase was chiefly due to employment of larger establishment in *North Malabar* and to a longer season.

17. *General protection.*—The area attempted to be protected was 2,494 square miles against 2,501 in the previous year and the percentage of failure was 6·7 against 1·4 in the previous year. The registration of fires in these areas continued to be unreliable.

18. Appendix D shows the number and origin of fires during the year. The number of fires increased by 21 per cent. and the area burnt was considerably in excess of that of last year. Moreover it is doubtful whether all the fires in *South Canara* and *North Malabar* especially were ever reported by the rangers.

(*c*) *Protection against Cattle.*

19. The area entirely or partially closed to grazing amounted to 15·1 per cent. of the total forest area against 18·5 per cent. in the previous year The whole forest area is closed to goats; the area open to all other cattle for grazing throughout the year was 75·2 per cent. Some of the areas closed last year in *North* and *Central Coimbatore* as communal punishments were reopened this year. The details of impoundings are given in Appendix E. The impoundings compared with those of last year decreased from 14,168 to 8,933. The decrease is striking in *North* and *Central Coimbatore* and is attributed to the marked fall in grazing offences in the former district and to the transfer of certain forests to village panchayats in the latter. In *South Coimbatore* the owners of a herd of cattle attacked four subordinates and forcibly rescued them; one of the subordinates died of injuries and three were wounded.

(*d*) *Protection against injuries from natural causes.*

20. *South Canara.*—*Strobilanthes* has appeared in such force in some of the fuel coupes of Coondapur and Sankaranarayana as to interfere with natural seed regeneration. *North Malabar.*—The experiment of attempting to keep down *lantana* by growing castor-oil plants with it, appears to prove that there is very little, if anything in that theory. *South Malabar.*—There were fresh attacks of *Hybloea* but they were reported to be checked by heavy rain which washed out the pupæ. A new moth trap is to be tried next season. In Nilambur 940 seers of locusts were caught and destroyed for one anna per seer. *Kollegal* and *North Coimbatore.*—Spike disease continued to play havoc with sandal. It is said to have spread now to all the sandal areas in these divisions. With respect to *lantana* and *prickly-pear* the district reports afford very little information.

4. Sylviculture.

(*a*) *Natural Reproduction.*

21. *South Canara.*—Bamboo in Kasaragod has begun to flower. *Hopea* seeded well everywhere and germination was abundant. *North Malabar.*—Teak reproduction is reported poor; and generally, owing to an exceptionally long drought lasting from November to June, it was a very poor year for all species. The bamboo seeding

which was spreading from the south-east has now covered the whole of the plateau. *South Malabar.*—*Xylia* seeding and germination is reported as abundant. This species is acquiring increasing prominence on the coast markets. Otherwise a poor year, especially as regards teak. The *Nilgiris.*—It is stated that there is nothing of interest to report. *Kollegal.*—Sandal reproduction is reported to be poor, probably the long drought after the north-east monsoon has killed off seedlings. But *Anogeissus* and *Hardwickia* seedlings are generally abundant and doing well. *North* and *Central Coimbatore.*—Generally poor; but with good reports of *Rosewood*, *Pterocarpus marsupium* and the *Terminalias* in the Minchiguli valley. *South Coimbatore.*—The large bamboo has flowered in many localities. There was a most satisfactory flowering and seeding of *Teak*, *Rosewood*, *Pterocarpus marsupium*, *Terminalias* and other species in the Anamalais.

(*b*) *Artificial Reproduction.*

22. *Regular plantations.*—In *South Malabar* the extension of the teak plantations was completed in the previous year. In 1912 of Amarampalam, 23,670 teak casualties were replaced. In the *Nilgiris* the experimental plantations of timber-yielding *Eucalypti* were maintained and the failures planted up. The following varieties in particular are reported to be thriving—*Eucalyptus punctata*, *Eucalyptus eugenioides*, *Eucalyptus acmenoides*, *Eucalyptus propinqua* and *Eucalyptus paniculata*. *Central Coimbatore.*—It is reported that 36 acres in the Virumandampalaiyam reserve were dibbled with palmyra seed and that an aggregate of 236 acres in certain fuel working circles were planted with basket plants; but with what species and what results is not mentioned. This sort of work in dry forests is almost invariably a waste of effort and should be discontinued. *South Coimbatore.*—There was no addition made to the Karianshola plantations but casualties were replaced. Attempts to plant up blanks in the dry fuel coupes in Udamalpet were a failure. Also sowings of tamarind and neem in the same area, although they germinated, came to nothing in the hot weather.

Taungya plantations—South Canara.—Sixty-seven acres were given out for Kumries as against 80 acres in the previous year. As the Kumries were failures no remuneration was paid to the Mahrattis. In *North Malabar* the Kurichyars in Kanoth continued cultivation but the district report does not say to what extent and the results are not reported. The Conservator has inspected some of the Kumries and the whole system in both districts is entirely wrong and a perfect failure. The areas are given for cultivation for only one year on payment; and, except the withholding of rewards, no responsibility is fixed upon the occupier for the success of his planting. Naturally if the people can get fresh areas to clear and burn year after year they can do without the rewards. Orders have been issued that new grants on these terms are prohibited.

Cultural operations.—In *South Canara* seeds were sown broadcast in the year's coupes and in the broken up ground caused by the operations are said to have germinated successfully. In various places *Hopea* seed has been sown with good results generally, but there is a want of system about such operations owing to which the results are very soon lost sight of. *North Malabar.*—The group system of teak planting in blanks was continued in the Begur reserve in which 4,860 pits were dug and planted; and in Chedleth reserve where 10,000 pits were planted. In the former the results are reported as fair, but in the latter no observations were made Seven thousand seedlings were put down in the fuel coupes in Kanoth of which 1,000 are reported as living. In *South Malabar* a nursery was stocked in the office compound with various species other than teak, from which the following number of plants were put out in various compartments—3,000 in Chatamborai, 1873; 1,700 in Edacode, 1891; 1,500 in Panangode, 1855. In the *Nilgiris*, *Central Coimbatore* and *South Coimbatore* nothing was done. *Kollegal*, 400 lb. of *Acacia arabica* seed were sown in Dodda Induvadi, 747 lb. of sandal in 100 acres of Guligi and two bags of *Hardwickia* and one bag of *Chloroxylon Swietenia* in Gundal coupe III, but no results are recorded in any case. *North Coimbatore.*—Dibbling of teak and other species in fuel coupes in Satyamangalam was a failure. Basket planting of *rosewood*,

Pterocarpus marsupium and *Terminalia tomentosa* was carried out in the four experimental plantations in Geddesal with fair results. In many other places similar work was done, and in fact there was more attention paid to these operations than in any other district.

(*c*) *Operations for improvement of the growing stock.*

23. In *South Canara* light improvement fellings with creeper cutting were carried out over 4,000 acres at a cost of Rs. 880 to the great advantage of the regeneration of *Hopea* which responds generously to this sort of treatment. *North Malabar.*—Thinnings in four teak plantations realised Rs. 800. *Lantana* was cleared in 40 acres of plantations for Rs. 150. *South Malabar*—Various teak plantations aggregating 731 acres and 122 acres in the Nilambur and Amarampalam ranges respectively were thinned. Creeper-cutting to the extent of 562 acres in Amarampalam was carried out for Rs. 445. Besides which 66½ acres in Mannarghat and all the plantations in Nilambur range which were thinned were worked over by the staff. Teak plantations of the years 1909 to 1912 (490 acres) were weeded at a cost of Rs. 1,454. *North Coimbatore.*—All the sandal coupes of the year were cleared of creepers and 135 acres in four fuel coupes in Satyamangalam were cleared of prickly-pear. *South Coimbatore.*—What are termed regeneration operations, viz., clearing undergrowth and girdling soft woods within one chain radius of seed bearers of the three principal species—*teak*, *rosewood* and *Pterocarpus marsupium*—have been carried out for the past five years in the Punachi working circle, including an area of 180 acres during the year under report, but with no striking success. In the same area improvement felling and weeding was done. Improvement fellings were also carried out in coupe I, compartment I of the Mount Stuart working circle, which included the removal of interfering bamboo growth.

(*d*) *Experiments.*

(i) On Species.

24. *Swietenia mahagoni.*—Fifty-one plants at Pilarkhan and Hebri in *South Canara* are doing well, but the few trees at Coondapoor are in a miserable condition. trees at Manantoddy continue to thrive, so do all those which have been put down in various places about Nilambur.

Swietenia macrophylla.—This species also flourishes about Nilambur. The average of the measurements recorded will give the girth in inches, equal to about three-fourths of what the height is in feet.

Rubber.—The *Para* species flourishes in Nilambur but is not doing very well at Tannir in *South Canara.*

Eleven varieties of *Eucalyptus* were planted in the Arboretum block, Cairn Hill, the *Nilgiris*, but it is too early as yet to express an opinion on the result.

Prosopis juliflora seed was obtained from the Punjab and planted in Udamalpet, *South Coimbatore*, with inconclusive results, but the experiment is being persevered with.

Bamboo.—In *Kollegal* the experiment of clean felling an acre of bamboo jungle in every month of the year with the object of ascertaining whether there is any particular period of the year in which such clearing assists in keeping down the species was disappointing. It was found that the regrowth was about the same in all twelve areas. A similar idea was followed out in *South Coimbatore* with different methods of removal, viz., burning, clean felling with removal and clean felling without removal. The burning was not thoroughly carried out, but so far as the regeneration of teak and other species went the most successful results were obtained on the area which was clean felled and all cut bamboos removed from the ground.

(ii) On Other Points.

25. In *South Malabar* observations for the purpose of ascertaining whether there is any raising of teak stem during the process of growth were discontinued in Edacode with negative results. Sample plots are however being laid out in five other areas to note rise or fall of marks on stems of trees. An experiment to show the

effect of setting ground fires on the larvæ of the defoliating moth was successful; but it is feared that some corresponding damage has been caused to teak saplings. Swamp areas were clean weeded and it was found that the operation although expensive was entirely successful in making them fit for teak planting. Samples of teak bored timber sent to the Forest Zoologist, Dehra Dun, resulted in the discovery of five new species. A considerable amount of seed of various species was collected and distributed upon requisitions to all parts of the Presidency, Dehra Dun and to British Africa.

5. Exploitation.

(a) *System of Management.*

26. The following table shows the application of the various sylvicultural systems in force—

Sylvicultural system.	Area in square miles.	Percentage of total area under each sylvicultural system.
Method of clear fellings by compartments	31	1·92
Uniform method	...	...
Group method	...	...
Selection method	346	21·44
Simple coppice	...	...
Coppice with standards	338	20·94
Method of improvement fellings	126	7·81
Areas not subjected to any definite system of working.	773	47·89
Total ...	1,614	100

(i) Major Forest Produce.

(1) *Clear or Regeneration Fellings.*

27. Clear or Regeneration Fellings—*Nil.*

(2) *Selection Fellings.*

28. Selection fellings were carried out over a portion of coupe VIII of Madibare working circle in *South Canara* and over 164 acres of coupe XVIII of Begur and 400 acres of coupe III of Chedleth in *North Malabar*; in the former district mature trees in Someshwar coupe X were sold standing, and dead trees in Parappa reserved forest were felled. In the *Nilgiris*, mature, unsound and dead sandalwood trees which yielded 400 maunds were felled in Sigur range. In *Kollegal* dead and dying spiked sandal trees were extracted from coupes III and IV of Madeswaranmalai and from coupes VIII and X of Bailur, in all 8,832 trees were extracted. Agricultural implements and small timber were supplied from Hanur coupe. *North Coimbatore.*—Sandalwood trees and bamboos were extracted from six coupes covering 12,777 acres and eight coupes of 17,660 acres, respectively; Jal trees in Onnaititu coupe I—187 acres—were sold standing and 608 trees were removed. *Central Coimbatore.*—Acacia trees in Kunnathur tank bed were felled. Coupe XIX of Pekadi leased forest (269 acres) and coupe V of Punachi working circle (92 acres) in *South Coimbatore* were felled.

(3) & (4) *Improvement and Coppice Fellings.*

29. *South Canara.*—Fifteen fuel coupes covering about 790 acres in Coondapur and Sankaranarayana ranges and portions of two coupes (27 acres) in Puttur and Kasaragod ranges were coppiced. Twenty-seven acres in Udipi range were felled to supply fuel to 204 sandalwood oil-stills. A coupe of 25 acres in Kanoth reserve in *North Malabar* was felled for supply of fuel to Tellicherry town; bamboos were also extracted from Kanoth coupe. *South Malabar.*—Thinnings were carried out in teak plantations and 37,043 trees were removed; 231 dead, wind-blown and uprooted trees were also removed. In the *Nilgiris* improvement felling was carried out over 22 acres in Mudumalai working circle; the yield was 3,478 cubic feet of teak and 54 cubic feet of vengai. Forty-two acres of blue-gum and acacia plantations in Ootacamund and Coonoor ranges were coppiced

for supply of firewood and charcoal to the public and to the cantonment at Wellington. *Kollegal.*—Portions of four fuel coupes covering 220 acres were coppiced. In *North Coimbatore* thirteen coupes covering 1,131 acres for supply of fuel and charcoal and eight coupes covering 190 acres for supply of dragpoles and agricultural implements were coppiced. *Central Coimbatore.* Coppice felling over twenty-one coupes covering 1,297 acres. *South Coimbatore.*—Improvement felling was made over 180 acres in coupes V and VI of Punachi working circle and about 360 acres were coppiced.

(5) *Unregulated Fellings.*

30. Cinnamon leaves for extraction of oil, and firewood required for working 145 stills were removed from unreserved lands in *South Canara*; the revenue realized was Rs. 1,627. Timber and bamboos were also removed from unreserved lands on payment of seigniorage. The removal of bamboos, fibre, canes and reeds on permits continued in *North Malabar*. *South Malabar.*—Bamboos were removed on permits from natural forests for rafting and floating timber. Two hundred and forty-two dead and wind-blown trees were removed from Karimpoya reserve on payment of a fixed value. The *Nilgiris.*—The demand for small timber, fuel, bamboos, etc., was met on a small scale by issue of permits. In *Kollegal* bamboos were removed on permits in places where no depots exist. *North Coimbatore.*—Timber (10,123 cubic feet), fuel (7,071 cubic feet) from unreserved lands and 1,516 bamboos from reserved forests were removed on permits. In *South Coimbatore* bamboos were removed on permits owing to a scattered demand.

(ii) Minor Forest Produce.

(1) *Miscellaneous Produce.*

31. Miscellaneous produce was leased out with the following exceptions :—*By Departmental agency.*—Manufacture of catechu in *South Canara*, collection in Mudumalai and Tunacadavu ranges in the *Nilgiris* and *South Coimbatore*, respectively. Collection of gallnuts, sambhur and deer horns, honey, wax, etc., from reserved forests in *Kollegal* and of all produce except tamarind, avaram and vembadam barks and date leaves in *North Coimbatore*. *By removal on permits.*—Thatch grass, stones, sand, metal, etc., in the *Nilgiris*, *Kollegal* and *South Coimbatore.*

(2) *Extraction of Fodder.*

32. Fodder grass was removed on permits in *South Malabar* and in *Coimbatore.* Thatching grass was removed free from reserved forests in *South Canara* and by the Todas on the plateau and by the Chetties of Mudumalai in the *Nilgiris.* The concession of free removal of grass is not required in *Malabar* as the demand is met from private forests.

(3) *Hay-making.*

33. About sixteen tons of hay were manufactured in *South Canara* for sale at the Kulkunda cattle fair and at Mangalore. There was no demand at the fair and the produce was wasted.

(4) *Grazing.*

34. Goat browsing is entirely prohibited. The forests of *South Malabar* are closed to grazing. Elsewhere grazing was as usual, regulated by issue of permits. The number of cattle licensed to graze on payment was 3,73,476 against 3,86,885 in the previous year.

(*b*) *Agency of Exploitation.*

(i) Departmental Agency.

35. *Major produce—South Canara.*—Felling of timber from one, and of fuel from seven coupes, extraction of dead trees from Parappa reserve and of sandalwood from the stumps of trees stolen from unreserved lands and extraction and transport of

bamboos in Uppinangadi range ; also creeper cutting and light improvement fellings. *North Malabar.*—Felling of 40,925 cubic feet of timber in Begur coupe XVIII ; 20,000 bamboos were extracted and 16,000 cubic feet of fuel felled from Kanoth reserved forest for supply to Tellicherry town ; 1,600 bamboos were also extracted from Begur reserve for experimental floating. *South Malabar.*—Thinnings in the teak plantations, dragging and floating logs and saplings and felling fuel and bamboos for rafting timber. In the *Nilgiris*, timber and sandalwood were felled in Mudumalai and Sigur ranges respectively. *Kollegal* and *North Coimbatore.*—Small timber and fuel were felled and bamboos and sandalwood extracted. *Central Coimbatore.*—Fuel felled over 29 acres and nine tons of charcoal manufactured. *South Coimbatore.*—Felling and transport of timber from the Anamalais and the leased forests and coppicing one fuel coupe.

Minor produce.—The details are given in paragraph 31 ; also the manufacture of hay in *South Canara.*

36. *Disposal of produce at the edge of the forests.*—In *South Canara* fuel on a small scale and 394 cubic feet of timber were sold at the edge of forests ; also bamboos were extracted from Nerankimale. There is no local demand for Government produce in *North Malabar* owing to existence of private forests. In *South Malabar* teak logs and saplings and miscellaneous logs felled in two plantations were sold on the river bank. Fuel felled departmentally in *Kollegal* and *North Coimbatore* were sold in the forests. In *Central* and *South Coimbatore* the disposal of produce was entirely carried out by contract agency.

(ii) By Purchasers.

37. Nine fuel and one timber coupe in *South Canara*, 400 acres of coupe III of Kurichiyat in *North Malabar*, coupe VI of Araipalayam in *Kollegal*, all fuel and bamboo coupes of 1914-15 in *North Coimbatore*, 18 fuel and 9 bamboo coupes in *Central Coimbatore* and all except one fuel coupe and two bamboo coupes in *South Coimbatore* were sold standing. The felling of 231 windblown and uprooted trees in plantations in *South Malabar* was given on contract. Cutting and removal of 172 cubic feet of Karimathi (*Terminalia tomentosa*) in the Mudumalai working circle in the *Nilgiris*. Also the unregulated fellings and the lease of miscellaneous produce referred to in paragraphs 30 and 31 *supra.*

(iii) & (iv) By Right-holders and under privileges and Free Grants.

38. The following abstract shows the quantity and estimated value of produce removed by right-holders and free-grantees :—

	Timber.		Fuel.		Bamboos.		Grass and grazing.	Other minor produce.	Total.
	Cubic feet.	Value.	Cubic feet.	Value.	Number.	Value.	Value.	Value.	Value.
		Rs.		Rs.		Rs.	Rs.	Rs.	Rs.
Right-holders	49,077	19,606	..	..	1,210	12	837	19	20,474
Free-grantees	8,390	1,447	3,415	109	13,405	169	..	470	2,195
Total ..	57,467	21,053	3,415	109	14,615	181	837	489	22,669

The estimated value of produce and grazing enjoyed by right-holders and removed by free-grantees was Rs. 20,474 and Rs. 2,195 respectively, against Rs. 13,933 and Rs. 1,501 in the previous year. Particulars are not available for the large quantities of timber, etc., removed without check under kumaki rules in *South Canara* and of fuel removed by Badagas in the *Nilgiris* on payment of a nominal annual fee of rupee one per house. The general permission to Badagas to remove two cart loads of firewood for cremation was cancelled during the latter part of the year. Free grants amounting to Rs. 716 and Rs. 278 were made to religious institutions and works of public utility respectively in *South Canara* and the grants in other districts were mainly for rebuilding houses destroyed by fire.

(c) *Outturn and Sources of Forest Produce.*

39. A comparison of the total outturn of major and minor produce collected by different agencies during 1913–14 and the previous year is made in the following abstract :—

Agency of exploitation.	Timber including sandalwood in cubic feet.		Fuel in cubic feet.		Bamboos in number.		Minor produce including grass and grazing in rupees.	
	1912–13.	1913–14.	1912–13.	1913–14.	1912–13.	1913–14.	1912–13.	1913–14.
By Government agency ..	286,927	256,604	2,071,673	1,634,965	206,909	158,545	25,647	28,229
By purchasers	300,788	370,524	2,068,520	2,532,559	4,818,838	4,788,599	88,225	144,205
By right-holders	33,386	49,077	28	..	1,392	1,210	721	856
By free-grantees	6,062	8,390	975	3,415	9,045	13,405	417	470
Total ..	627,163	684,595	4,141,196	4,170,939	5,036,184	4,961,759	113,010	173,760

Departmental agency—Major produce.—The decrease under "timber" was chiefly in *North Malabar* due to postponement of felling in Begur coupe; and in the *Nilgiris* to the stoppage of improvement felling in Mudumalai working circle through the previous year's stock remaining unsold. The decrease under "fuel" was mainly in *South Canara* and *North Coimbatore* due to sale of coupes standing and in *Kollegal* to working of smaller areas, a large stock of previous year's fellings remaining undisposed of. The decrease under "bamboos" was due to extraction of a smaller number chiefly in *South Canara*, owing to introduction of contract system, in *South Malabar* to fewer bamboos used for floating, timber having been sold in plantations; and in *Kollegal* to absence of demand. The total outturn of "minor produce" rose from 146 tons in the previous year to 153 tons; the increase was chiefly due to good crops of tamarind, gallunts, etc., and to increased outturn of horns, honey, etc., in *Kollegal* and *North Coimbatore*. *By pruchasers*—No useful comparison can be made of the outturn by this agency owing to the unreliable accounts, and records of the lessees. Under "major produce" there was an increase under "timber" and "fuel" and a decrease under "bamboos." The increase under "timber" was chiefly in *South Canara* due to increased demand for miscellaneous timber, the sale of reserved trees having been stopped; in *South Malabar* to sale of uprooted and wind-blown trees, and in *Central Coimbatore* to increased outturn of timber from fuel coupes and to an increase in the value of trees removed from darkhast lands. The extension of the contract system mainly accounted for the increase under "fuel". The decrease under "bamboos" was chiefly in *Central Coimbatore* due to the working out of all accessible areas in previous years.

CHAPTER III.—FINANCIAL RESULTS.

40. The financial position of the year is compared with that of the previous year and the average of the preceding quinquennium in the following abstract :—

	1913–14.	1912–13.	Average for the preceding five years.
	Rs.	Rs.	Rs.
Revenue	8,41,735	9,07,220	7,58,031
Expenditure—			
Refunds	7,189*	2,925	3,149
A. Conservancy and Works	4,18,683	4,39,315	4,41,861
B. Establishments	3,66,169	3,60,646	3,28,109
Total Expenditure ..	7,92,041	8,02,886	7,73,119
Net ..	+ 49,694	+ 1,04,334	— 15,088

* Excludes Rs. 3,588 relating to the Bombay Presidency.

The net results show a surplus of Rs. 49,694 and the receipts were the largest for the circle for many years except the last which was specially characterised by extraordinary realisations under sandalwood, timber and plantation leases on the Anamalais Of the receipts 59 per cent. was from major produce, 10 per cent. from grass and grazing, 10 per cent. from minor produce and 21 per cent. from miscellaneous items. Thirty-five per cent. of the expenditure was spent on exploitation of the forests, 34 per cent. on their up-keep and improvement and 31 per cent. on miscellaneous items. The estimated value of the produce at sale depots at the close of the year was Rs. 1,63,416 against Rs. 2,12,882 at its commencement. The revenue outstanding was Rs. 61,110 of which only Rs. 7,722 fell due within the year.

The important variations between the actuals of this year and those of the previous year are explained below:—

RECEIPTS.

(i) *By Departmental Agency.*

Timber — Rs. 36,056. The decrease was chiefly due to a smaller outturn by Rs. 54,000 of plantation teak logs, in *South Malabar*. The deficit was partly counterbalanced by larger sales in the *Nilgiris*, and better prices in *South Coimbatore*.

Fuel — Rs. 13,439
Bamboos — Rs. 1,603
} Due chiefly to the introduction of contract system.

Sandalwood — Rs. 36,545. Owing to non-felling of certain areas in *Kollegal* for want of establishment, and to the fact that the sales of 1912–13 were inflated by realizations on unsold stock of previous year.

Minor produce — Rs. 6,673. Due to a large stock remaining unsold in *Kollegal* and *North Coimbatore* for want of good offers and to the right of collection of miscellaneous produce being leased out in the *Nilgiris* and *South Coimbatore* to purchasers.

(ii) *By Purchasers.*

Timber + Rs. 5,586. Due to sale of dead and wind-blown trees in *South Malabar* and to increased revenue realised by sale of trees on darkhast and unreserved lands chiefly in *North Malabar*, *North and Central Coimbatore*.

Fue + Rs. 7,763. Due to better prices realised by leases of the right for selling fuel in towns and to sale of greater number of cinnamon oil stills in *South Canara*, and to sale of coupes standing in *North Coimbatore*.

Bamboos + Rs. 5,788. Due mainly to sale of additional coupes and an advance collection of the revenue for 1914–15 in *North Coimbatore*.

Grazing — Rs. 2,129. Due chiefly to a smaller number of foreign cattle brought for grazing in *Kollegal* and in *North Coimbatore*, to graziers taking permits for the village forests.

Minor produce + Rs. 20,400. Due to better prices realized for leases of miscellaneous produce in all districts except the *Nilgiris* and *Central Coimbatore*.

(iii) *Miscellaneous* (*including confiscated drift and waif wood*).

Revenue — Rs. 8,517. The smaller revenue realized by sale of elephants, and fewer sales of lands on the Anamalais chiefly accounted for the decrease. The decrease would have been greater but for receipts from a large quantity of confiscated sandalwood in *South Canara*, confiscated timber left unremoved by a defaulting contractor in *South Malabar* and compounding fees in *South Canara* and *South Coimbatore*.

EXPENDITURE.

A.—Conservancy and Works.

The expenditure fell short of the previous year by Rs. 20,632. The chief causes contributing to this decrease were the felling of a smaller area in Begur coupe in *North Malabar*, sale of timber in the plantations in *South Malabar*, postponement of improvement fellings in the *Nilgiris*, transport of less fuel to Mangalore in *South*

Canara for want of demand, savings in transport and commission charges caused by local sales of sandalwood, casualties among livestock, construction of fewer new buildings, non-completion of several sanctioned works for want of establishment or labour and the stopping of plantation extensions in *South Malabar*.

B.—Establishment.

The payment of leave allowance to a second-grade Conservator, the promotion of Rangers, the employment of eight additional Deputy Rangers, local allowance sanctioned for subordinates in *Kollegal* and *North Coimbatore*, revision of pay to Range clerical establishment, and the appointment of an Assistant Veterinary Inspector chiefly accounted for the increase of Rs. 5,523.

CHAPTER IV.—ADMINISTRATION.

41. The charge of the circle was held by Mr. F. A. Lodge, C.I.E., up to 3rd February 1914 when he proceeded on combined leave, and by Mr. C. D. McCarthy for the rest of the year.

District and Range charges.—Owing to the departure of two Divisional officers on medical leave in May and June and the shortage of superior officers, their divisions were placed, and still remain, in the charge of adjoining District Forest officers which of course is not good for all the four charges concerned. Moreover the partition of the *South Canara* division into two, remained in abeyance for the same reason.

The same condition of things applies also to range charges. The formation of two extra ranges in *Kollegal* has had to stand over owing to want of Rangers. In fact no less than one-third of the ranges in this circle are controlled by Deputy Rangers and directly appointed untrained probationers. Progress on works is consequently not satisfactory.

42. *Work of superior officers—Extracts of Collectors' remarks—South Canara—By Mr. Couchman.*—" Mr. Raman Menon is a very active and energetic officer, and has done good work in checking the thefts of sandalwood from Government unreserves." *Malabar—By Mr. Innes.—North*—" Mr. Foulkes worked with his usual keenness." *South*—" Mr. Bourne is an able and energetic officer and his work throughout this year was uniformly good." *The Nilgiris—By Mr. Young.*—" Was very good." This remark applies to Mr. Cox. As regards *Kollegal* and the three *Coimbatore* divisions which were controlled by Messrs. Wood, Fischer, Littlewood, and Panchapakesa Ayyar, the Collector remarks that as he arrived after the close of the year he is unable to report on the work of the District Forest officers. But I should like to say that so far as my opportunities of judging have permitted, they are all keen and hardworking officers. Of the Extra Assistant Conservators not in divisional charge, Mr. Hart has been uniformly well reported on, and Mr. Venkataramanan's work has been satisfactory.

43. *Executive establishment.*—The following Rangers have been specially noted for good work—G. S. Lasrado, (since promoted to Extra Assistant Conservator), L. S. Janes, E. B. Ramachandra Rao, and A. R. Narasimha Ayyangar. One Ranger was reduced temporarily and two resigned. The work of Deputy Rangers may be described as fairly satisfactory. The probation of one Deputy Ranger was terminated, and the services of two were dispensed with ; two resigned, four were suspended, one was reduced and one dismissed.

44. *Protective establishment.*—With a few exceptions the work of the lower grades was as usual characterised by dishonesty and inattention to duty. I am not sure that the men themselves are entirely responsible for this unsatisfactory condition of things. Of late years the cost of living has so increased that the wage earning class from whom this branch of the service is recruited, are absolutely unable to make an honest living on a pay of Rs. 5 and Rs. 6 which we give to our watchers and Rs. 8 which is the pay of the lowest grade guard. All Forest officers I am sure would rather employ one man on Rs. 10 than two on Rs. 6. However this condition of things is shortly to be amended by the re-organisation proposals which are now before Government, and we may all hope to see a considerable improvement in the near

future. The services of four Foresters were dispensed with, two were reduced and seven suspended. Among the guards, two resigned, one was invalided, the services of twenty were dispensed with, thirty-five were suspended, nine reduced and eleven dismissed.

45. *Ministerial establishment.*—The work is reported to be generally satisfactory in all districts. The head clerks of *South Malabar*, the *Nilgiris*, *Central* and *South Coimbatore* are specially mentioned for good work. One clerk in *Kollegal* who was under suspension at the beginning of the year, resigned and two clerks were removed for inefficiency. In *North Coimbatore* one Range clerk was suspended and reduced and the services of one dispensed with. In *Central Coimbatore* one Range clerk who was suspended for disobedience of orders resigned. In *South Coimbatore* one clerk in the District Forest Office and one range clerk were reduced. Much difficulty is reported to have been felt in finding efficient men for the *Kollegal* office and the range offices in *North Coimbatore*. The work in the Circle office continued to be satisfactory. But it lost a very good man in its Touring Clerk who died of plague last October.

46. *Health of the establishment and casualties.*—The general health of the establishment was good in *North Coimbatore*, fair in *South Canara* except at the foot of the ghats and bad as usual everywhere else, except on the *Nilgiri* plateau. The casualties were one in *South Canara*, two in each of *South Malabar*, *Central* and *South Coimbatore*, four in the *Nilgiris* and three in *Kollegal* and one in the Circle office.

47. *Relations between Revenue and Forest officers.*—The District Forest Officers of *Kollegal*, *North* and *Central Coimbatore* and Range officers in *South Canara*, *Central* and *South Coimbatore* attended the jamabandi. No grievances of importance were brought to light. As usual such attendance was not required in *Malabar* ; but Forest Officers generally were in constant touch with the Revenue officials. The relations continued to be satisfactory.

48. *Service books.*—Maintained and verified up to the close of the financial year except in the *Nilgiris* where they were verified up to the close of the calendar year.

49. *Tours of the Forest Member.*—The Hon'ble Mr. R. C. C. Carr inspected the plantations in the *Nilgiris* and the proposed Thadagam-Anaikatti road, and the reserves in the Bolampatti and Erode ranges in *Central Coimbatore* which are to be transferred to panchayat control.

50. *Conservator's inspection.*—The District Forest offices of *South Canara*, *North Malabar*, *South Malabar* and *South Coimbatore* and the forests of *South Canara*, *North Malabar*, the *Nilgiris* and *Central Coimbatore* were inspected during the year. All the offices were found to be generally in good order. The total number of days spent in camp was 184.

51. *Touring of District Forest Officers.*—More than the prescribed minimum of touring was done by all the District Forest Officers except *North* and *South Malabar*. Mr. Foulkes went on leave on two occasions for annual camps of exercise ; this combined with the fact that he was very ill in May 1914 accounted for the short touring of about one week. The short touring in *South Malabar* was due to the fact that the timber operations of the year in the Nilambur Range were situated for the greater part in blocks lying within the five mile radius.

52. *Inspection of Range offices.*—All Range offices and all sale depots except one each in *Kollegal* and *North Coimbatore*, were inspected during the year. The results were fairly satisfactory in all the Range offices with four exceptions. The inspection of Kollegal and Satyamangalam Minor Produce depots could not be taken up for want of time. One depot-keeper in *South Coimbatore* was suspected of embezzlement but the charge was subsequently withdrawn for want of proof. The value of timber and other produce missing was however recovered from him and he was dismissed

53. *Audit of accounts of District Forest offices.*—The accounts of all the offices except *North Malabar* and *Kollegal* were test audited by the Local Fund Audit establishment. The Assistant Accountant-General inspected also the accounts of the offices of *North* and *Central Coimbatore*. The results were generally satisfactory.

54. *The Madras Forest College, Coimbatore.*—The Ranger and Deputy Ranger who were under training last year returned with Higher Standard certificates. Four Deputy Rangers were deputed for training during the year.

55. *Vernacular Training School.*—The year's session was held in *South Canara* and commenced two months earlier than usual in order to close before the burst of the monsoon. The school started with thirty students of whom two were foresters. One deserted and was dismissed, one was absent for more than sixty days and was not eligible for a certificate. Of the remaining twenty-eight, eleven secured first-class and seventeen second-class certificates. The health of the Instructors and students was good. The Instructor Kunhiroyan, Ranger, sixth grade, who was formerly a Havildar in the Moplas, maintained excellent discipline and turned out a particularly smart and respectable lot of men. The Conservator inspected the school in camp in March.

CHAPTER V.—GENERAL.

56. *Realization of revenue from the usufruct of toddy-yielding trees, etc.*—Rs. 2,152 were realized in *South Canara* against 2,203 in the previous year. A small amount was realized in *Kollegal* and none in the other districts.

57. *Measures adopted to encourage the growth of manure-leaf-yielding trees and shrubs.*—No steps were taken in this direction in any of the districts as the demand for green leaf manure was met in some districts from private forests and unreserved and patta lands; and in others such measures were not required.

58. *Supply of forest produce to meet the wants of the people—South Canara.*—Free removal of thatching grass, used also at times as fodder, and of grass and leaves from a portion of the Baindur forest was continued. No abuse of this privilege came to notice. Timber and fuel were sold in retail in certain localities. *Malabar.*—Local demands were met as usual from private forests and unreserved lands. Cutting and removal of bamboos, fibre, etc., were allowed on permits in *North Malabar*, but as regards bamboos the lease system is being introduced. The *Nilgiris.*—Permits were as usual issued for small timber, fuel, bamboos and other produce. The Badagas continued to obtain their annual requirements of fuel on payment of Re. 1 per house. The public of Coonoor and Ootacamund obtained their supply of fuel and charcoal partly from the depots but chiefly by direct delivery from the plantations. Small timber and agricultural implements were retailed in *Kollegal* through the agency of monigars and permit-issuing officers and in *North Coimbatore* from forest depots; periodical auctions were also held in the latter division to clear off stock. Drag poles continued to be sold to cartmen through the agency of the toll-gate keeper at Dimbam at a prescribed maximum rate. *Central* and *South Coimbatore.*—The supply of forest produce was left to contractors to whom most of the coupes were sold standing, but in the latter district the departmental supply of brake-poles to cartmen on the Attakatti ghat road was continued. Head load permits were also issued for the removal of brushwood from the coupes under working in *North* and *Central Coimbatore.* In *Central* and *South Coimbatore* the subject of opening small coupes for rural supply is under investigation. There is no demand for such coupes in the other districts.

59. *Improvement of water-supply and grazing facilities in Government grazing grounds.*—The Government Order to report on this subject in the annual administration report which was communicated in Board's Proceedings Forest No. 125, dated 29th June 1914, is noted for compliance next year.

60. *Grant of cowles for the formation of casuarina plantations in sandy areas.*—There were no applications.

RULES UNDER THE FOREST ACT.

61. (*a*) *Timber Transit Rules.*—The modifications proposed last year for safeguarding the interests of Government in private lands in *South Canara* were not approved. In *South Malabar* the registration of property marks alone was enforced. In *North Malabar* and in the four divisions of *Coimbatore* the rules are reported to have worked satisfactorily.

(*b*) *Rules under section* 26 *of the Forest Act.*—The rules have worked satisfactorily and no abuse of the privileges has been brought to notice. The area of unreserved lands under the control of the Forest Department was the same as last year.

(*c*) *Other rules.*—The sandalwood transit rules in *Kollegal* and *North Coimbatore* worked satisfactorily. Large thefts of sandalwood were detected in *South Canara* and in order to safeguard the interests of Government a draft set of rules to regulate the transit of sandalwood have heen prepared and submitted to Government for approval. Shooting and fishing rules in the *Nilgiris* worked well. The special trout fishing rules underwent some slight alterations with the object of facilitating the issue of daily licenses.

62. *Hill tribes.*—The lease of lands to the hill tribes on nominal or no rent, on condition of their supplying labour for departmental works and planting forests with valuable species was continued in all districts except in *South Malabar* where the necessity for such inducement was not felt. Thus 210 acres were leased out to the Kudubies and Mahratties for Kumri cultivation in *South Canara*, 78 acres to the local Kurichiyers for ponam cultivation in *North Malabar*, 1,229 acres to the Sholagars in *North Coimbatore*, and 729 acres to the Irulars in *Central Coimbatore*. Nothing of interest is reported about Kurumber settlements in the *Nilgiris*. Fresh leases are being entered into in *Kollegal* with the Sholagars. In *South Coimbatore* the formation of three or four Mulcer settlements is in progress and every effort is being made to induce them to settle down.

63. *Cultivation in reserved forests.*—Tenant-at-will leases covering 21 acres were continued in *South Canara* on an annual rent of Rs. 24. The area leased out in *North Malabar* for wet cultivation aggregated 481 acres at an annual rent of Rs. 2–8–0 per acre. In *South Malabar* the lease of 4 and 120 acres for paddy cultivation in the old and new Amarampalam reserves, on an annual rent of Rs. 10 and 305 were renewed for one and two years respectively. In the *Nilgiris*, 51 acres of land were granted to the Kasaba families free of rent for cultivation, and the grant of about 150 acres to Irulars and Kurumbers free of rent was continued. The lease for rubber cultivation in *Kollegal* continued; but rubber having proved a failure, coffee was allowed to be raised on the land. In *North Coimbatore* the grant of 186 acres on payment of rent for cultivation continued during the year. Nine blocks aggregating about 6,134 acres on the Anamalais were leased out to planters.

Live and Dead Stock.

64. (*a*) *Elephants.*—There were 21 captures and three births during the year; 18 were auctioned for Rs. 35,150, one was shot owing to infirmity and seven died; leaving a balance of 115 at the close of the year. The condition of all the elephants was good and rewards were as usual granted to such of the mahouts whose animals were not on the sick list for more than three days at a time or more than 12 days in the year. Of the seven that died, one was over 50 years old, one was a calf of three months and the rest were young ones under 20 years.

(*b*) *Bullocks and buffaloes.*—There were no new purchases of bullocks during the year Of the 137 that remained at the close of last year, 29 died of old age and weakness, 25 were sold being unfit for forest work, 12 condemned by the Special Veterinary Inspector and destroyed, one was killed by a tiger, and one fell into an elephant pit and was killed. There were 69 bullocks at the end of the year. Of the 29 reported above to have died of old age and the 12 destroyed, 22 and 11 respectively belonged to the *South Coimbatore* district which is the sole charge of the Assistant Veterinary Inspector. An enquiry is being held into the matter although it should be said that all the animals are reported to have been aged and previously condemned. The 48 buffaloes which remained at the commencement of the year increased by 10 new purchases during the year. Three died and four were sold being old and unfit for work leaving a balance of 51.

(*c*) *Veterinary establishment.*—Mr. F. X. Mascarenhas, Special Veterinary Inspector, paid constant visits to the live stock in different districts and attended to their ailments. His work continued to be good. The Assistant Veterinary Inspector who was in charge of the live stock in *South Coimbatore* last year was found not quite suited for the work and was replaced by another shortly before the close of the year.

(*d*) *Inventory of valuable stock.*—Stock registers are reported to have been maintained and verified at inspections.

65. *Rain-gauges.*—Maintained and the readings recorded as usual with the following exceptions :—One rain-gauge in *Kollegal* got out of order and took seven months to be replaced during which no readings were recorded. Two rain-gauges were in disrepair in *South Coimbatore*, of which one was replaced during the year and the other was not. The readings in *South Canara* continued to be unreliable.

THE GASS FOREST MUSEUM AND THE MUSEUM GARDEN AT COIMBATORE.

66. The number of visitors to the museum was 5,411 against 7,044 during the previous year; the decrease was due to the prevalence of plague for six months in the year. Ninety-one specimens were contributed during the year. The herbarium was further enriched by the contribution of 203 identified specimens by Mr. C. E. C. Fischer and of 538 specimens by the Conservator of Forests, Travancore. The Museum garden was maintained as usual, but the failure of the monsoon has affected it badly. Several seedlings were raised in the nursery for planting in the Race Course avenue and the Coronation Park, Coimbatore. Rupees 228 were realized by sale of flowers, plants and fruits.

SUITS.

67. A lessee of private land in the Attapadi valley in *Central Coimbatore* claimed a right of way over the Mangarai-Anaikatti path through the Tadagam reserve and instituted a suit against Government. He also applied for an injunction against the order prohibiting his right of way pending decision of the suit. This was not granted and the suit was also decided against him in the original court; the final issue however was still under appeal.

COIMBATORE,
23*rd September* 1914.

C. D. McCARTHY,
Conservator of Forests, Western Circle.

ADMINISTRATION REPORT OF THE MADRAS FOREST COLLEGE, COIMBATORE, FOR THE YEAR ENDING 30TH JUNE 1914.

CHAPTER I.

1. The office of Principal was held by Mr. F. L. C. Cowley-Brown, Deputy Conservator of Forests, from 1st July 1913 to 19th August 1913 and from 23rd February to 30th June 1914. He was on special leave on urgent private affairs from 20th August 1913 to 22nd February 1914, during which period the Principalship was held by Mr. R. D. Richmond, Deputy Conservator of Forests.

2. During the year Mr. Wimbush, Deputy Conservator of Forests and Imperial Instructor, left the college on transfer to the Forest College, Dehra Dun, and was relieved of his duties in this College on the afternoon of 5th June 1914. His place was taken by Mr. C. B. Dawson, Deputy Conservator of Forests, who joined the college on the 27th May 1914.

3. The appointments of Provincial Instructors were held by the following officers during the year:—

(1) M.R.Ry. V. Subrahmanya Ayyar Avargal, M.A., F.L.S., F.Z.S., Extra Deputy Conservator of Forests, until 27th April, when he was relieved to take up the appointment of Conservator of Forests in Travancore State.

(2) M.R.Ry. K. R. Venkataramana Ayyar Avargal, Extra Assistant Conservator of Forests, throughout the year.

(3) M.R.Ry. C. Srinivasa Rao Avargal, B.A.

The post of sub-assistant surgeon attached to the college was held as follows:—

V. V. Kannan Nayar from 1st July to 7th October 1913, when he proceeded on medical leave for three months.

From 8th October 1913 to 4th November 1913 one division of the college had no medical officer. The post of the second sub-assistant surgeon has been held by A. R. Shanmukhanathan from 6th September 1913.

4. The Hon'ble Mr. W. O. Horne, C.S.I., vacated the Presidentship of the Board of Visitors in April 1914, and was succeeded by the Hon'ble Mr. R. C. C. Carr.

Mr. C. D. A. McCarthy, Conservator of Forests, filled the vacancy on the Board caused by the appointment of Mr. F. A. Lodge, C.I.E., to the Inspector-Generalship of His Highness the Nizam's Forests.

The Board of Visitors met at Coimbatore on the 27th March 1914, and remained till the close of the month when the final examinations of the 1912–14 divisions were held and certificates were awarded. The number of students at the end of the course was 23.

The following list in order of merit shows the certificates awarded:—

Honours.

1.	S. Chinnadorai, B.A., ...	Central Circle.
2.	R. E. Lemos	Southern ,,
3.	B. V. Nagaraja Ayyar	Northern ,,

Higher Standard.

4.	N. K. Sarma	Northern Circle.
5.	K. Karunakaran Nambiyar	Western ,,
6.	H. Tammian	Central ,,
7.	A. Nicholas	Western ,,
8.	P. S. Varadakrishnamachari	Central ,,
9.	C. S. King	Northern ,,
10.	D. Ramakrishniah	,, ,,

Higher Standard—cont.

11. S. Chidambara Ayyar	Central	Circle.
12. S. Sundaravaradachari	Southern	,,
13. S. M. Razvi	Central	,,
14. V. D. Ramalingam	Southern	,,
15. L. J. Taylor	,,	,,
16. T. T. Ansep	Central	,,
17. B. Krishnasawmi Rao	Northern	,,
18. M. Krishna Rao	,,	,,
19. C. G. Krishna	,,	,,
20. L. R. Narayana Ayyar	Southern	,,

Lower Standard.

21. N. E. Kanakiah	Central	Circle.
22. C. G. Ganapathy	Northern	,,
23. M. A. Ghatala	Southern	,,

The Campbell Walker prize for the best all-round Ranger was awarded to student C. S. King. Student C. G. Ganapathy gained the Braiser prize for the best out-door Ranger.

The division numbered originally 31 students, eight having been withdrawn or removed during the course.

5. In January the Forest Commissioner and the Conservator of Forests, Western Circle, visited the combined camp of both divisions at Bolampatti where the Senior Division students were engaged in the Final Survey Practical examination. The Forest Commissioner accompanied by Mr. F. A. Lodge, C.I.E., also visited the camp at Ootacamund in May.

CHAPTER II.

6. During the year under report 33 students entered the college on 1st July 1913 for the course of 1913-15.

The list of students admitted is attached. Out of these 33 students four were withdrawn from the college for various reasons leaving 29 in residence on 30th June 1914.

CHAPTER III.

7. The old Taluk cutcherry, to which the college was originally given prior claim whenever required, was converted into a hostel for the Junior division. It is not a very convenient or comfortable building for the students and is at a considerable distance from the temporary college, but everything possible has been done to eliminate its disabilities.

8. The year under review has been one of marked progress.

The arrival of the Junior division has stimulated progress and keenness in every direction. The inclusion of State and private students has been all for the good of the college as well, it is hoped for the future benefit of forests beyond the confines of the Presidency. Some of the students hitherto deputed have been of too advanced in age and of too poor a physique to profit by the college course. The curriculum is exacting and searching, and consequently students over 30 have not the resiliency of temperament necessary for assimilating to the full the benefits of the training. Such men are moreover a drag on their fellows and do not tend to raise the general tone of the college. Twenty-five is a suitable age maximum and should only be exceeded for thoroughly justifiable reasons. Students over 30 years of age should not be admitted.

In several instances an insufficient education and mental equipment, and in certain cases even a deficiency of moral character, as evidenced both by their past record and by their career at the college, has rendered the removal of students necessary in the interests of the college as a whole.

The two divisions at present in residence present an extremely satisfactory average of mental and physical energy.

9. The work during the year followed the programme sanctioned by Government. The Junior division during the cold weather tour camped at Mount Stuart, Nilambur, Nedungayam, Bolampatti and Mundanthurai, while the Senior division proceeded to Polur, Chittoor, Kodur, Kodivengamabhavi, Adoni, Kupagal, Ramandrug, Tornagal, Chelama, Gadigundam, Gundlabrahmeswaram, Diguvametta, Waltair, Russellkonda, Bolampatti, Salem (Shevaroys), Pennagaram, Hogayanakal, Anchetti, Denkanikottah and Jowlagiri. Besides general inspections and practical instruction in forestry and botany the specific projects and operations on tour consisted of —

1. Marking permanent sample plots (to be annually checked and remeasured by the students) in many divisions, valuation surveys, the detailed study of the most advanced teak, red sanders and sandal forests, reboisement, sandal distilling, fire protection work, timber depots, charcoal burning, hay-pressing, ropeway, saw mills, line-cutting in heavy jungle, preparation of a working plan, botanical collections, transport of timber by elephants, various systems of harnessing elephants, survey of coupes, survey of permanent camps, map-reading, demarcation, ghat tracing, road construction, road traces, alignment and construction of tramway, estimating in all its branches, terracing and contour alignment, bridge-building, blasting and improvement of river bed, quarrying, detailed examination of engineering apparatus, tile-making and rafting.

The junior students took a prominent part in the operations connected with the capture of a wild elephant at Mount Stuart.

During the Senior division tour in Cuddapah a prize, for the best essay on red sanders, kindly offered by Mr. Whitehead, Deputy Conservator of Forests, was won by student C. S. King. All definite results and measurements were carefully recorded with diagrams, sketches, plans, etc., in the bound volumes comprising the Tour Journals of the Instructors and in the college sample plot registers. Copies of such records were supplied to District Forest Officers whenever necessary.

The Senior division tour was undoubtedly expensive and somewhat exhausting, but the opportunity of visiting the cream of the forests of the Presidency was certainly of the highest professional advantage to the students.

Both divisions were present at the Walliar Elephant sale and were also, under Mr. Richmond's orders, in camp together at Bolampatti. This combined camp was found to be in every way beneficial and will be permanently retained in the touring programme.

The object of all operations on tour has been to combine the maximum of practical utility to the forest districts visited as is compatible with the instructional requirements of the students concerned. During the head-quarter terms both divisions were given practical work, survey engineering and planting at the new college site every Saturday. A large number of engineering models (bridges, etc.) were added to the college stock. These will be of great utility for the practical bridging course at the college site.

While on tour, as in head-quarters, the absence of a second Imperial Instructor was found a serious disability. The strain was relieved by the departure of the Senior division at the end of March.

10. The Junior division alone was in residence during the hill tour term on the Nilgiris in May and June, and carried out (besides instructional work of a general nature) the rectification of the boundaries of the Baikie reserve, sample plot markings on Cairn Hill, the survey of the proposed permanent camp in Arambi, and the preparation of a working plan (including survey and demarcation) for Mutinad reserve. Visits were paid to the Government gardens, the Observatory charcoal kilns and Eucalyptus oil distillery.

The heights and girths of several known and recorded trees were remeasured and shola trees were carefully studied. At Coonoor profitable visits were made to Sim's Park and the neighbouring plantations, and the design and constructional detail of bridges were also examined.

In future years the carrying out of the sylvicultural and engineering prescriptions of Mr. Cox's working plan will provide for the students during the Nilgiri tour ample work of great instructional value.

11. The improvement, physical and mental of the students during the tour was noteworthy and it is difficult to lay too much stress on the advantages of this camp. It corresponds to the Himalayan tour of the Dehra Dun students, with the additional advantage on the Nilgiris of compact, even aged, pure, and almost normal forests giving an equal annual sustained yield and comprising certainly the greatest volume and the highest annual increment, as well as probably the greatest average height in the Indian Empire. It is an established principle in forest education that the examination of ideal forests is an essential feature in the training, and for this reason the students of all European schools are taken to visit the most perfect examples of sylviculture in their own or neighbouring countries.

The impressions thus retained are of the utmost benefit in instilling into the mind of the student the results to be aimed at and the proper methods for attaining them.

During the Nilgiri tour the students have comparatively few lectures and are often out in the forests from 7-30 A.M. to 4-30 P.M. The advantage of such a training in many cases so totally different from their previous mode of life is perhaps sufficiently obvious.

12. The internal administration of the college during the past year pursued a comparatively uneventful course. Experiment gave place to precedent, and the working was consequently smoother and less difficult all round. The members of the staff knew exactly what was required of them, and profiting by the experience of the previous year the touring was generally more comfortable and healthy.

The minor alterations in the syllabus and the reallotment of marks have proved advantageous. The curriculum for the two-year course is now settled and should require very little modification for some years to come.

The periodical examinations have been fixed for October and March in each year, and the proportion of marks to be assigned for each subject at several examinations has been laid down.

In addition to the ordinary drill twice a week, fire drills and whistle drills have been held periodically.

"First aid" is now a recognized subject, and the final examination will, it is hoped, be conducted under the auspices of St. John's Ambulance Association.

On tour a few lectures are devoted to camp hygiene and to the importance of taking ordinary precautions in malarious tracts.

The drinking and bathing sources are carefully supervised. Sanitation is made a special feature, and every inmate of the camp is periodically dosed with quinine and is compelled to sleep on a charpoy or cot. All students have to sleep under mosquito curtains, and a kit inspection of warm clothing is held at the beginning of the hill tour. The weights of the students are taken and recorded at the beginning of each year. At times there has been a little trouble with regard to the status of the medical officers, but it is anticipated that the recent pronouncement of Government will render the position more satisfactory for all parties.

The tents supplied to the college have in some cases been of unsatisfactory quality. All defects are repaired at once, but owing to the long journeys and the necessity of striking camp on a fixed date the wear and tear is heavy, and the life of the college tents is necessarily briefer than is the case in district charges.

13. During the year under report the athletics were supervised by Mr. Wimbush with gratifying results and Mr. Richmond while in charge, by his example and personal help, contributed greatly to the marked success of the college teams at hockey, football, cricket and tennis. Cups were presented for the Marathon races of both divisions; and thanks to the generosity of the forest officers in all parts of the Presidency, a most successful athletic meeting was held during the rains term.

The Athletic Club is now an important and integral feature of the college system and owing to the Government grant has been placed on a secure financial basis. The institution of college "colours" has proved a keen stimulus to the physical activities of all classes of students.

14. A feature of the college life is the willingness of all classes and castes to help one another in field work. As much as possible small sections are formed under varying leaderships. As a result there has gradually been formed a tradition of co-operation and co-ordination that should prove a future source of strength in overcoming difficulties and in acquiring habits of self-reliance and control.

15. Mr. Richmond instituted the maintenance by all students of tour journals for the major subjects. The recording in these journals of full details of all work on tour is of undoubted benefit to the students, although the examination of the thirty journals involves a large expenditure of time on the part of the Instructor in charge of that subject.

Botanical collections have also been made compulsory.

The text-books on sylviculture, utilization and engineering require to be carefully revised, if not rewritten, but until the expected addition is made to the staff it will not be possible to undertake this very necessary task.

16. The college stores were minutely checked in August and April.

17. Regulations for the internal management of the college have been systematised and will be shortly issued. A history of the college (to be annually added to) has been compiled and Mr. Srinivasa Rao has prepared a history of the Gass Museum.

18. The transfer of Messrs. Wimbush and Subrahmanya Ayyar has been a severe loss, and the departure of Mr. Lodge has deprived the Principal of a kindly and a sympathetic adviser whose views, based on a first-hand knowledge of the history and requirements of the college, were always at the service of the administration in cases of difficulty and doubt.

After severing his connection with the college Mr. Lodge intimated his desire to found a prize for the encouragement of engineering. His generous offer has since been accepted by the Board of Visitors. The prize will be known as the Lodge prize for Practical Engineering.

The Indian Forester has placed with the Principal a sum for the foundation of a valuable prize for a subject to be selected by the Principal in the spring term.

There are a considerable number of subjects in the curriculum that have not as yet been made objects of special prizes.

19. The Principal is indebted to the Conservator of Forests, Northern Circle, and to the District Forest Officersof South Malabar, Nilgiris, South and Central Coimbatore, Trichinopoly and Tinnevelly, South Vellore, Chittoor, East Cuddapah, Bellary, West and South Kurnool and Ganjām Forest divisions, for their courtesy and help in affording camping facilities and for the cordial assistance in carrying out the college tours. Similarly the thanks of the college are due to those officers who have kindly presented books to the students' library.

20. That the past year has been one of progress and harmony is due to the conscientious and enthusiastic discharge of their multifarious duties by all members of the staff.

The onerous responsibilities of the house tutor have been most ably carried out to the Principal's entire satisfaction by Messrs. Subrahmanya Ayyar and K. R. Venkataramana Ayyar successively.

The office business has been satisfactorily managed by the head clerk M. K. Pattabhirama Ayyar during the period he was in charge and the storekeeper A. Marudachalam Pillai.

Madras Forest College, Coimbatore, 1912–1914.

Number.	Name of student.	Circle and district to which attached.	Rank.	Educational qualifications.
	Western Circle.			
1	C. P. Garudachala Mudaliyar ..	Coimbatore (South) ..	Ranger V	Matriculation. Withdrawn from the College.
2	A. J. Lemerle	Do. (North)..	Deputy Ranger II ..	*Nil.* Withdrawn from the College.
3	K. Karunakara Nambiyar	Malabar (South) ..	Do. ..	Matriculation.
4	A. Nicholas	Canara, South ..	Ranger VI	Do.
	Southern Circle.			
5	L. R. Narayana Ayyar	Madura	Do. V	Do.
6	R. Subrahmanya Ayyar	Do.	Do. VI	*Nil.* Withdrawn from the College.
7	L. J. Taylor	Tinnevelly	Do. V	High School Examination.
8	S. Thungaswami Cross	Do.	Do. VI	Matriculation. Died.
9	R. E. Lemos	Salem (North) ..	Do. VI	Matriculation.
10	Muhammad Asadulla Ghatala ..	Do. ..	Do. VI	*Nil.*
11	V. D. Ramalingham	Do. ..	Deputy Ranger II ..	Matriculation.
12	S. Sundaravaradachari	South Arcot ..	Do. ..	F.A.
	Central Circle.			
13	E. H. Roze	Cuddapah (East) ..	Ranger V	*Nil.* Withdrawn from the College.
14	H. Tammiah	Do. ..	Do. VI	Matriculation.
15	P. S. Varadakrishnamachari ..	Do. ..	Deputy Ranger II ..	Do.
16	C. Varadarajulu Nayudu	Nellore	Ranger VI ..	Matriculation. Withdrawn from the College.
17	John Martin	Anantapur	Do. ..	*Nil.* Withdrawn from the College.
18	T. T. Ansep	Do.	Do ..	Matriculation.
19	S. M. Razvi	Guntūr	Do. ..	*Nil.*
20	M. Venkatappayya	Do.	Deputy Ranger II ..	Matriculation, Withdrawn from the College.
21	S. Chidambara Ayyar	Do.	Do. ..	Matriculation.
22	S. Chinnadorai	Chittoor	Do. ..	F.A.
23	N. E. Kanakiah	Bellary	Do. ..	Matriculation.
	Northern Circle.			
24	C. S. King	Vizagapatam ..	Ranger VI ..	*Nil.*
25	N. K. Sarma	Ganjām	Deputy Ranger II ..	Matriculation.
26	M. Krishna Rao	Gōdāvari (Lower) ..	Do. ..	Do.
27	B. V. Nagaraja Ayyar	Kurnool (South) ..	Do. ..	Do.
28	C. G. Ganapathy	Do. ..	Do. ..	*Nil.*
29	B. Krishnaswami Rao	Do. ..	Do. ..	*Nil.*
30	C. G. Krishna	Kurnool (West) ..	Do. ..	Entrance Examination, Allahabad University.
31	D. Ramakrishnayya	Do. ..	Do. ..	Matriculation.

Madras Forest College, Coimbatore, 1913—1915.

Serial number.	Name of student.	Circle and province to which attached.	Rank.	Educational qualifications.
	Government Students.			
1	J. A. P. D'Cruz	Northern Circle	Ranger V	Matriculation.
2	B. Punniah	Do.	Ranger VI	F.A.
3	N. Vijayarangam	Do.	Deputy Ranger II	Matriculation.
4	S. Jothinayagam Pillai	Do.	Do.	Do.
5	E. W. Fernandez	Central Circle	Ranger VI	F.A.
6	J. A. D'Cruz	Do	Do.	*Nil.* Withdrawn from the College.
7	A. Sidha Pillai	Do.	Deputy Ranger II	*Nil.*
8	R. Alagiriswami Nayudu	Do.	Do.	Matriculation.
9	T. G. Sankaran Nayar	Southern Circle	Ranger VI	B.A.
10	S. Ramanujam Sesha	Do.	Do.	Matriculation.
11	C. A. Razak	Do.	Do.	*Nil.* Withdrawn from the College.
12	A. K. Kandan	Do.	Deputy Ranger I	Matriculation.
13	P. Miranda	Western Circle	Deputy Ranger II	Do.
14	M. Anbu	Do.	Do.	Do.
15	H Myers	Do.	Deputy Ranger I	Do.
16	B. S. Ramaswami Ayyar	Do.	Deputy Ranger II	Do.
17	B. Tammayya	Coorg	Forester	Do.
	State Students.			
18	P. Velayudhan Nayar	Travancore State	....	B.A.
19	R. Srikanta Pillai	Do.	....	B.A.
20	K. Kunjukuttan Raja	Do.	....	Matriculation.
21	C. S. Veeraraghava Ayyar	Do	....	Do.
22	S. C. Varadarajan	Mysore State	....	Do.
23	M Muhammad Sheriff	Do.	....	Do.
24	T. Subba Rao	Do.	....	Matriculation (Bombay).
	Private Students.			
25	K. C. Joseph	Private Student	....	Matriculation.
26	T. N. Kochunni Tirumalpad	Do.	....	B.A.
27	R. Govinda Pillai	Do.	....	Matriculation.
28	Y. S. Chennigaraya	Do.	....	Do.
29	I. John	Do.	....	F.A.
30	K. S. Ramayya	Do.	....	School Final (Travancore).
31	A. N. Padmanabha Pillai	Do.	....	School Final (Travancore). Withdrawn from the College.
32	T. V. Ommen	Do.	....	School Final (Travancore).
33	R. S. Hariharan	Do.	....	Matriculation. Withdrawn from the College.

SUMMARY of revenue and expenditure for the forest year ending 30th June 1914.

Head of service.	Amount. Rs.
Receipts.	
V (*b*)	2,306
A.—Expenditure.	
I (*a*)	19
III	—3
VI (*e*)	7,088
VII (*a*)	—2
VII (*b*)	653
VIII (*c*) (1)	46
VIII (*e*)	348
VIII (*g*)	334
IX (*b*)	103
Total	8,586
Refunds	73

Summary of revenue and expenditure for the forest year ending 30th June 1914—*cont.*

Head of service.			Amount.
		B.—Establishment.	
			Rs.
I	(*b*)		28,392
	(*c*)		19,794
	(*d*)	P.	2,127
		T.	110
II	(*b*)		6,396
	(*c*)		8,951
	(*d*)		874
III	(*a*)		977
	(*b*)		411
	(*d*)		6,032
		Total ...	74,064

ABSTRACT showing the value of live-stock, stores, tools, etc., for the year ending with 30th June 1914.

District.	Description of stock.	On hand at commencement of the year (from 1st July 1913).		On hand at the end of the year (up to 30th June 1914).		Difference in value in favour of the year.	Difference in value against the year.
		Number.	Amount.	Number.	Amount.		
			Rs. A. P.		Rs. A. P.	Rs. A. P.	
Madras Forest College.	Surveying and other instruments.	493	5,115 0 3	717	6,270 7 7	1,155 7 4	..
	Tools	214	375 10 6	383	680 3 10	304 9 4	..
	Furniture	280	1,526 3 8	406	2,426 12 8	900 9 0	..
	Scientific apparatus.	2,474	2,422 6 0	2474	2,422 6 0	..	..
	Tents	84	7,995 0 3	101	10,370 8 3	2,375 8 0	..
	Uniforms	62	201 14 0	244	592 11 6	390 13 6	..
	Miscellaneous ..	406	1,363 5 9	455	1,660 3 9	296 14 0	..
	Total ..	4,013	18,999 8 5	4,780	24,423 5 7	5,423 13 2	..

TABLE OF CONTENTS.

	PAGE
Appendix A.—District areas and forest reserves	i & ii
Do. B.—Particulars of balance of lands under settlement	iii to v
Do. C.—Statement showing the area of reserved forests for which final maps have been prepared	vi
Do. D.—Abstract of fires	vii & viii
Do. E.—Comparative statement of impounded cattle	ix
Area of reserved forests and reserved lands (No. 65)	x to xxi
Progress made in, and the expenditure incurred on, forest settlements (No. 66)	xxii to xxvii
Record of demarcation and maintenance of boundaries (No. 67)	xxviii & xxix
Forest areas surveyed and under survey (No. 68)	xxx to xxxiii
Progress made in working plans (No. 69)	xxxiv & xxxv
Communications and buildings (No. 70)	xxxvi to xlix
Register of breaches of Forest Rules (No. 71)	l to lxvii
Appendix to Annual Form No 71	lxviii to lxx
Area of forest tracts protected from fire (No. 72)	lxxi to lxxiii
Area closed and open to grazing (No. 73)	lxxiv & lxxv
Return of grazing in the State forests (No. 74)	lxxvi to lxxix
Artificial reproduction (No. 75)	lxxx & lxxxi
Statement showing the outturn of timber, fuel and bamboos and agency of exploitation (No. 76)	lxxxii to xcix
Outturn of minor forest produce (No. 77)	c & ci
Account of timber, etc., in depots and sold locally (No. 78)	cii to cv
Statement showing the value of timber and other produce at Sale depots (No 79)	cvi to cviii
Summary of revenue and expenditure (No. 80)	cix to cxvii
Summary of the above prepared in the Board's office	cxviii & cxix
Outstandings and liabilities on account of contractors and disbursers (No. 81)	cxx
Revenue received and outstandings on account of revenue (No. 82) ...	cxxi
Statement of financial results (No. 83)...	cxxii
Statement of elephants, etc. (No. 84)	cxxiii & cxxiv
Abstract of value of stores, tools and plant (No. 85)	cxxv

APPENDICES.

APPENDIX A.—District areas and Forest reserves (1913–14).

District.	(*a*) Total area excluding feudatory and tributary States.	(*b*) Area excluding zamindari, whole inam villages and minor inams in ryotwari tracts.	(*b*) Occupied area.	Particulars of remaining area (columns 3—4).		
				(*b*) Unoccupied cultivable, uncultivable and forest areas.	(*a*) Areas for which returns are not available.	Total of columns 5 and 6.
1	2	3	4	5	6	7
Northern Circle.	ACS.	ACS.	ACS.	ACS.	ACS.	ACS.
Ganjam	5,417,984	2,928,188	443,733	765,391	1,719,064	2,484,455
Vizagapatam	11,022,477	846,878	184,359	662,519	..	662,519
Godavari	3,980,698	2,123,995	601,278	1,519,225	3,492	1,522,717
Kistna	3,780,254	1,670,765	1,015,199	618,632	36,934	655,566
Kurnool	4,827,314	4,032,721	1,529,421	2,503,300	..	2,503,300
Total ..	29,028,727	11,602,547	3,773,990	6,069,067	1,759,490	7,828,557
Central Circle.						
Bellary	3,656,339	2,983,587	1,959,132	1,024,455	..	1,024,455
Anantapur	4,299,968	3,714,191	1,783,319	1,930,872	..	1,930,872
Guntur	3,670,687	2,919,944	1,848,836	1,071,108	..	1,071,108
Cuddapah, West	3,771,968	3,220,576	963,372	2,257,204	..	2,257,204
Do. East						
Nellore	5,103,053	2,326,957	945,542	1,381,415	..	1,381,415
Chingleput	1,965,283	1,287,006	674,571	612,435	..	612,435
Chittoor	3,631,782	1,757,114	457,357	1,299,757	..	1,299,757
Total ..	26,099,080	18,209,375	8,632,129	9,577,246	..	9,577,246
Southern Circle.						
North Arcot	3,033,517	2,550,140	1,092,650	1,457,490	..	1,457,490
South Arcot	2,693,229	* 2,413,447	* 1,527,078	* 886,369	..	886,369
Salem	4,031,872	3,120,475	1,111,310	2,009,165	..	2,009,165
Trichinopoly	3,158,521	2,253,137	1,554,816	698,321	..	698,321
Tanjore	2,375,386	1,583,774	1,145,933	437,841	..	437,841
Madura	3,146,485	2,075,835	1,154,956	920,879	..	920,879
Ramnad	3,159,226	447,166	264,987	182,179	..	182,179
Tinnevelly	2,744,237	1,796,590	1,206,568	590,022	..	590,022
Total ..	24,342,473	16,240,564	9,058,298	7,182,266	..	7,182,266
Western Circle.						
South Canara *	2,573,422	2,573,422	821,551	1,749,817	2,054	1,751,871
Malabar *	3,708,416	3,694,886	1,338,220	2,356,666	..	2,356,666
The Nilgiris	646,061	651,212	* 191,411	459,801	..	459,801
Coimbatore	4,989,867	4,557,986	2,512,163	2,045,823	..	2,045,823
Total ..	11,917,766	11,477,506	4,863,345	6,612,107	2,054	6,614,161
Grand Total ..	91,388,046	57,529,992	26,327,762	29,440,686	1,761,544	31,202,230

(*a*) Area by professional survey. (*b*) Area according to village maps.

* Revised figures furnished by the Collector.

Appendix A.—District areas and Forest reserves (1913-14)—*cont.*

District.	Reserved forests and reserved lands.			Percentage of column 10 to column 3.	Percentage of column 10 to column 7.
	Reserved forests under Act V of 1882.	Reserved lands.	Total of reserves (columns 8 and 9).		
	8	9	10	11	12
Northern Circle.	ACS.	ACS.	ACS.		
Ganjām	364,132	44,480	408,612	13·95	16·45
Vizagapatam	193,832	6,727	200,559	23·68	30·27
Gōdāvari	532,027	274,444	806,471	37·97	52·96
Kistna	177,328	..	177,328	10·61	27·05
Kurnool	1,685,812	69	1,685,881	41·81	67·35
Total ..	2,953,131	325,720	3,278,851	28·26	41·88
Central Circle.					
Bellary	4,01,361	40,023	441,384	14·79	43·08
Anantapur	475,321	6,578	481,899	12·97	24·96
Guntūr	521,247	..	521,247	17·85	48·66
Cuddapah, West	1,163,437	107	1,163,544	36·13	51·55
Do. East					
Nellore	472,001	..	472,001	20·28	34·17
Chingleput	133,973	19	133,992	10·41	21·88
Chittoor	537,155	21	537,176	30·57	41·38
Total ..	3,704,495	46,748	3,751,243	20·60	39·17
Southern Circle.					
North Arcot	770,846	100	770,946	30·23	52·89
South Arcot	215,796	..	215,796	8·94	24·34
Salem	879,136	40,910	920,046	29·48	45·79
Trichinopoly	215,275	4,610	219,885	9·75	31·48
Tanjore	11,719	..	11,719	0·73	2·67
Madura	422,888	20	422,908	20·37	45·92
Rāmnād	46,724	..	46,724	10·44	25·64
Tinnevelly	227,576	72	227,648	12·67	38·58
Total ..	2,789,960	45,712	2,835,672	17·46	39·48
Western Circle.					
South Canara	510,590	346	510,936	19·85	29·16
Malābar	323,389	35,238	358,627	9·71	15·22
The Nilgiris	289,429	52,508	341,937	52·51	74·37
Coimbatore	1,502,057	7,162	1,509,219	33·11	73·77
Total ..	2,625,465	95,254	2,720,719	23·70	41·13
Grand Total ..	12,073,051	513,434	12,586,485	21·89	40·10

NOTE—*Central Circle.*—As figures for columns 2 to 7 are not yet available in the Settlement Department of the Board's Office, those given in the last administration report have been adopted.

Southern Circle.—As figures for 1913-14 are reported to be not available for North Vellore and North Salem divisions, the previous years' figures have been adopted for North Arcot and Salem districts for columns 2 to 7.

APPENDIX B.—Particulars of balance of lands under Settlement (1913–14).

District.	Forest Settlement.					
	Total number and area of blocks under settlement up to the end of 1913–14.		Total number and area of blocks constituted finally as reserved forests up to the end of 1913–14.		Balance at the end of 1913–14.	
	Number.	Area.	Number.	Area.	Number.	Area.
1	2	3	4	5	6	7
Northern Circle.		S. M.		S. M.		S. M.
Ganjam	(c) 66	639	65	569	1	70
Vizagapatam	57	(b) 311	56	303	1	8
Godavari, Upper	(c) 37	782	27	428	10	354
Do. Lower	43	479	42	404	1	75
Kistna	69	277	69	277	..	..
Kurnool, East	27	1,000	27	1,000	..	..
Do. South	(c) 41	766	39	766	2	(a)
Do. West	43	867	43	867	..	..
Total ..	383	5,121	368	4,614	15	507
Central Circle.						
Bellary	171	(d) 627	170	627	1	(e) ..
Anantapur	139	753	136	743	2	10
Guntur	180	814	180	814	..	..
Cuddapah, West	79	734	79	734	..	..
Do. East	(f) 88	1,083	87	1,083	1	(e) ..
Nellore	227	738	227	738	..	..
Chingleput	198	209	198	209	(g) ..	(e) ..
Chittoor	142	840	139	840	3	(e) ..
Total ..	1,224	5,798	1,216	5,788	7	10
Southern Circle.						
North Vellore	105	* 489	102	* 489	3	(e) ..
South do.	77	* 715	75	* 715	2	(e) ..
South Arcot	(h) 116	(h) 337	116	337	..	..
North Salem	78	838	77	792	1	46
South do	87	599	84	581	3	18
Trichinopoly	(i) 152	(i) 362	148	355	4	7
Madura	158	(j) 661	154	661	4	(e) ..
Tinnevelly	107	429	105	429	2	(e) ..
Total ..	880	4,430	861	4,359	19	71
Western Circle.						
South Canara	189	799	182	798	7	1
Malabar, North	32	262	30	262	2	(a)
Do. South	†8	143	†7	108	1	35
The Nilgiris	437	475	437	475	..	..
Kollegal	27	731	13	730	14	1
Coimbatore, North	25	922	23	922	2	(a)
Do. Central	53	363	47	353	6	10
Do. South	19	454	17	454	2	(a)
Total ..	790	4,149	756	4,102	34	47
Grand total ..	3,277	19,498	3,201	18,863	75	635

* Excludes the areas disafforested on the Javadis. † Revised figures furnished by the Collector.

(a) Less than half a square mile.
(b) Excludes 2·05 square miles of Karakavalasa Leased Forests and its East and West blocks.
(c) Previous year's figures incorrect.
(d) Excludes 63 square miles of Sandur Leased Forests.
(e) Less than one square mile.
(f) Correct number reported by the Collector taking originals and extensions separately.
(g) Enclosures in Perungoli and Nandambakkam reserves.
(h) Excludes 14 blocks of 8 square miles disafforested during the year.
(i) Excludes 4 blocks of 1 square mile disafforested during the year.
(j) Difference of 5 square miles due to recomputation of areas of reserves investigated by the Special Deputy Collector.

Appendix B.—Particulars of balance of lands under Settlement (1913-14)—*cont.*

District.	Settled and reported on.								Settled but not reported on.		Settlement proceeding.	
	Notified under section 16 during 1913-14 but reservation effected only after the 30th June 1914.		With Board or Government awaiting publication of notification under section 16.		Returned by the Board for revision, remaining either with Collector, District Forest Officer or Forest Settlement Officer.		Total settled and reported on.					
	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.
	8	9	10	11	12	13	14	15	16	17	18	19
Northern Circle.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.
Ganjām	..	..	..	..	..	..	..	..	1	0	..	..
Vizagapatam	..	..	1	8	..	..	1	8	..	..	..	..
Gōdāvari, Upper	..	..	..	..	..	..	..	..	..	..	10	354
Do. Lower.	..	..	..	..	..	..	..	..	1	75	..	..
Kistna	..	..	..	..	..	..	..	..	..	..	..	..
Kurnool, East	..	..	..	..	..	..	..	..	..	..	..	..
Do. South	..	..	..	..	1	(*a*)	1	(*a*)	..	..	1	(*a*)
Do. West	..	..	..	..	..	..	..	..	..	..	..	..
Total	..	..	1	8	1	(*a*)	2	8	2	145	11	354
Central Circle.												
Bellary	1	(*b*)	..	..	..	..	1	(*b*)	..	..	..	..
Anantapur	..	..	..	..	..	..	..	..	1	10	1	(*b*)
Guntūr	..	..	..	..	..	..	..	..	..	..	..	..
Cuddapah, West	..	..	..	..	..	..	..	..	..	..	..	..
Do. East	..	..	..	..	..	..	..	..	..	..	1	(*b*)
Nellore	..	..	..	..	..	..	..	..	..	..	..	..
Chingleput	..	..	..	..	..	..	..	..	..	..	(*c*) ..	(*b*)
Chittoor	..	..	..	..	..	..	..	..	2	(*b*)	1	(*b*)
Total	1	(*b*)	..	..	..	..	1	(*b*)	3	10	3	(*b*)
Southern Circle.												
North Vellore	..	..	..	..	..	..	..	..	2	(*a*) ..	1	(*a*) ..
South do.	..	..	..	..	..	..	..	..	..	..	2	..
South Arcot	..	..	..	..	..	..	..	..	..	..	..	..
North Salem	..	..	..	..	..	..	..	..	1	46	..	..
South do.	..	..	..	..	..	..	..	..	2	6	1	12
Trichinopoly	..	..	1	1	..	..	1	1	..	..	3	6
Madura	..	..	2	(*b*) ..	..	..	2	(*b*) ..	..	..	2	(*b*) ..
Tinnevelly	..	..	..	..	..	..	..	..	..	..	2	(*b*) ..
Total	..	..	3	1	..	..	3	1	5	52	11	18
Western Circle.												
South Canara	..	..	..	..	..	..	..	..	2	(*a*)	5	* (*a*)
Malabar, North	..	..	..	..	..	..	..	..	..	..	2	* (*a*)
Do. South	1	35	..	..	..	..	1	35	..	..	..	..
Kollegal	..	..	..	..	..	..	..	..	..	..	14	1
Coimbatore, North.	..	..	..	..	..	..	..	..	1	(*a*)	1	* (*a*)
Do. Central.	..	..	..	..	..	..	..	..	2	9	4	1
Do. South.	..	..	..	..	..	..	..	..	..	..	2	* (*a*)
Total	1	35	..	..	..	..	1	35	5	9	28	3
Grand total	2	35	4	9	1	(*a*)	7	44	15	216	53	(*d*) 375

* Aggregate one square mile.

(*a*) Less than half a square mile.
(*b*) Less than one square mile.
(*c*) Enclosures in Perungoli and Nandambakkam reserves.
(*d*) Includes one square mile being the aggregate area of blocks less than one square mile.

Appendix B.—Particulars of balance of lands under Settlement (1913–14)—*cont.*

District.	Of lands notified under section 4.																											
	1894–95.		1900-01.		1901-02.		1902–03.		1903–04.		1904–05.		1905–06.		1906–07.		1907–'8.		1908–09.		1909–10.		1910–11.		1911–12.		1912–13.		1913–14.	
	Number	Area.	Number	Area.	Number	Area.	Number	Area.	Number	Area.	Number	Area.	Number	Area.	Number	Area.	Number	Area.	Number	Area.	Number	Area.	Number	Area.	Number	Area.	Number	Area.	Number	Area.
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49
Northern Circle.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.
Ganjām	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	70	..	..	..	..
Vizagapatam	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	8	..	..	..	..	..	..
Gōdāvari, Upper	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	99	6	255
Do. Lower	..	..	..	..	1	75	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kistna	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kurnool, East	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Do. South	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	(a)	..	..	1	(a)
Do. West	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	..	..	..	..	1	75	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	8	2	70	4	99	7	255
Central Circle.																														
Bellary	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	(a)	..	..
Anantapur	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	10	1	(a)	..	..	..	..	..	..
Guntūr	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cuddapah, West	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Do. East	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	(a)
Nellore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chingleput	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	(c)	(a)	(	) (a)	..	..
Chittoor	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	(a)	2	(a)
Total	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	10	1	(a)	(c)	(a)	2	(a)	3	(a)
Southern Circle.																														
North Vellore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	(a)	..	..	..	..	2	(a)	..	..
South do.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	(a)
South Arcot	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North Salem	..	..	1	46	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South do.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	6	..	..	..	..	..	..	1	12
Trichinopoly	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	2	..	..	..	..	..	..	1	4
Madura	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	(a)	2	(a)
Tinnevelly	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	(a)	..	..	..	..
Total	..	..	1	46	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	5	8	..	..	2	(a)	4	(a)	6	16
Western Circle.																														
South Canara	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	(a)	6	1
Malabar, North	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	(a)
Do. South	..	..	..	..	..	..	..	..	1	35	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kollegal	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	(a)	11	1
Coimbatore, North	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	(a)	..	..	1	(a)
Do. Central	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	9	3	1
Do. South	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	(a)
Total	..	..	..	..	..	..	..	..	1	35	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	(a)	7	9	25	3
Grand total	..	..	1	46	1	75	..	..	1	35	..	..	..	..	..	..	..	..	1	1	6	18	2	8	5	70	17	108	41	(b)275

(a) Less than one square mile.
(b) Including the area of blocks less than one square mile, the aggregate area works out to 275 square miles.
(c) Enclosures in Perungoli and Nandambakkam reserves.

APPENDIX C.—Statement showing the area of reserved forests for which final maps have been prepared during 1913–14.

District.	Area of reserved forests.	Area of reserved forests for which final maps have been prepared.
Northern Circle.	SQ. MLS.	SQ. MLS.
Ganjām	569	569
Vizagapatam	303	303
Gōdāvari, Upper	428	428
Do. Lower	404	404
Kistna	277	153
Kurnool, East	1,000	(a) 997
Do. South	766	(a) 671
Do. West	867	(a) 593
Total	4,614	4,118
Central Circle.		
Bellary	627	626
Anantapur	743	743
Guntūr	814	191
Cuddapah, West	734	734
Do. East	1,083	1,083
Nellore	738	738
Chinglepat	209	209
Chittoor	840	783
Total	5,788	5,107
Southern Circle.		
Vellore, North	489	489
Do. South	715	552
Arcot, South	337	337
Salem, North	792	792
Do. South	581	581
Trichinopoly	355	335
Madura	661	603
Tinnevelly	429	420
Total	4,359	4,109
Western Circle.		
South Canara	798	681
Malabar, North	262	..
Do. South	108	2
The Nilgiris	475	86
Kollegal	730	718
Coimbatore, North	922	920
Do Central	353	331
Do. South	454	454
Total	4,102	3,192
Grand total	18,863	16,526

(a) Previous years' figures are incorrect.

Appendix D.

District.	A. Fires caused by accident or through carelessness in burning fire lines.		B. Fires entering the forests by crossing exterior fire lines.		C. Fires beginning inside the reserves or fire-traced areas. Owing to carelessness or accident.							
					By workmen employed in the forests, by purchasers of forest produce and by hay cutters.		By villagers, travellers, etc. passing through the forests.		By railway engines.		By lighting or by fire balloons.	
	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.
1	2	3	4	5	6	7	8	9	10	11	12	13
Northern Circle.												
Ganjām	13	226	4	89	..	..	9	74	..	..	..	..
Vizagapatam	1	2	6	2,326	5	641	2	11,406	..	..	..	..
Gōdāvari, Upper	..	..	30	134,502	..	..	6	2,123	..	..	..	..
Do. Lower	1	4	12	4,415	6	852	62	6,712	..	..	..	..
Kistna	1	10	..	..	3	1,605	2	50	..	..	..	..
Kurnool, East	..	..	5	2,770	..	..	2	620	..	..	..	..
Do. South	5	930	8	2,607	3	820	2	58	3	59	..	..
Do. West	1	1	2	800	1	10,000	8	13,716	1	5	..	..
Total	22	1,173	67	147,509	18	13,918	93	34,759	4	64	..	..
Central Circle.												
Bellary	..	..	..	..	2	13	..	..	..	..	..	..
Anantapur	1	10	..	..	..	..	..	..	1	2,400	..	..
Guntūr	..	..	..	..	..	..	5	513	..	..	..	..
Cuddapah, West	4	80	3	1,840	3	120	2	56	1	12	..	..
Do. East	4	1,881	3	3,020	1	1,000	4	2,179	1	57	..	..
Nellore	1	4	1	2	2	..	1	..	..	..	..	..
Chingleput	..	..	..	..	..	..	..	..	..	..	..	..
Chittoor	..	..	5	4,007	1	100	15	909	..	..	..	..
Total	10	1,975	12	8,869	9	1,233	27	3,657	3	2,469	..	..
Southern Circle.												
North Vellore	3	202	1	500	..	..	..	..	..	..	..	..
South do.	..	..	..	..	..	..	3	380	..	..	..	..
South Arcot	..	..	..	..	..	..	3	13	..	..	..	..
North Salem	2	2	3	3,090	1	150	12	4,308	..	..	..	..
South do.	..	..	..	..	..	..	11	288	..	..	..	..
Trichinopoly	..	..	..	..	..	..	4	27	..	..	..	..
Madura	5	913	18	445	..	..	2	330	..	..	..	..
Tinnevelly	3	689	5	631	5	1,117	3	1	..	..	4	683
Total	13	1,806	27	4,666	6	1,267	38	5,347	..	..	4	683
Western Circle.												
South Canara	11	19	46	1,300	2	14	86	1,839	..	..	7	29
Malabar, North	3	7,105	2	70	1	5	1	2	..	..	..	..
Do. South	13	2,923	..	..	1	25	1	7	..	..	1	2
The Nilgiris	..	..	3	16,235	..	..	11	67	1	1	..	..
Kollegal	1	1,920	10	44,190	..	..	1	960	..	..	..	..
Coimbatore, North	2	43	5	851	4	3,080	34	10,412	..	..	..	..
Do. Central	6	101	3	48	3	246	6	149	2	29	..	..
Do. South	..	..	8	2,291	10	1,592	8	223	..	..	1	5
Total	36	12,111	77	64,985	21	4,962	148	13,659	3	30	9	36
Grand total	81	17 065	183	226,029	54	21,380	306	57,422	10	2,563	13	719
Grand total for 1912–13	45	23,601	166	52,494	32	4,309	254	53,965	9	215	23	628

Appendix D—*cont.*

District.	C. Fires beginning inside the reserves or fire-traced areas—*cont.*								Causes unknown.		Total of A, B and C and causes unknown.	
	By intentional firing.						Total.					
	In order to obtain new grass.		In order to turn out game or to reduce cover.		Maliciously fired.							
	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.
	14	15	16	17	18	19	20	21	22	23	24	25
Northern Circle.												
Ganjam	..	..	..	..	..	..	9	74	14	806	40	1,195
Vizagapatam	2	90	..	..	1	22	10	12,159	15	2,359	32	16,846
Godavari, Upper ..	4	6,440	4	4,425	1	160	15	13,148	28	15,029	73	162,679
Do. Lower ..	..	..	4	164	1	..	73	7,728	..	..	86	12,147
Kistna	..	..	..	..	..	..	5	1,655	..	..	6	1,665
Kurnool, East	2	1,970	2	1,310	5	6,200	11	10,100	21	5,695	37	18,565
Do. South	5	4,607	2		3	8,053	18	13,597	28	22,412	59	39,546
Do. West	2	269	5	13,158	20	43,681	37	80,829	37	34,508	77	116,138
Total ..	15	13,376	17	19,057	31	58,116	178	139,290	143	80,809	410	368,781
Central Circle.												
Bellary	..	..	..	..	..	..	2	13	134	52,631	136	(*a*) 52,644
Anantapur	..	..	..	..	2	1,794	3	4,194	93	21,714	97	25,918
Guntur	..	..	..	..	..	..	5	513	..	..	5	513
Cuddapah, West	25	2,547	1	15	9	1,099	41	3,849	38	13,238	86	19,007
Do. East	43	13,899	1	76	..	..	50	17,211	38	5,518	95	27,630
Nellore	3	420	.	..	1	..	7	420	1	.	10	426
Chingleput	..	..	..	..	..	..	..	..	4	212	4	212
Chittoor	36	698	..	..	6	1,463	58	3,170	17	715	80	7,892
Total ..	107	17,564	2	91	18	4,356	166	29,370	325	94,028	513	134,242
Southern Circle.												
North Vellore	4	660	..	..	1	1	5	661	30	1,518	39	2,881
South do.	24	1,887	..	..	2	11	29	2,278	24	1,548	*53	3,826
South Arcot	2	11	..	..	..	..	5	24	23	40	8	64
North Salem	2	80	..	..	1	175	16	4,713	19	5,614	53	13,419
South do.	14	397	..	.	3	70	28	755	6	338	44	1,093
Trichinopoly	..	..	..	..	3	72	7	99	..	..	*7	99
Madura	8	768	1	30	5	578	16	1,706	36	2,319	75	5,383
Tinnevelly	4	1,150	10	1,891	8	2,390	34	7,232	2	161	44	8,713
Total ..	58	4,953	11	1,921	23	3,297	140	17,468	140	11,538	*320	35,478
Western Circle.												
South Canara	8	344	2	100	15	720	120	3,046	53	2,441	230	6,806
Malabar, North .. .	..	..	..	..		.	2	7	2	473	9	7,655
Do. South †	1	40	..	..	..	..	4	74	2	501	19	3,498
The Nilgiris †	6	506	..	..	..	..	18	574	14	1,219	35	18,028
Kollegal	1	10,240	..	..	..	..	2	11,200	33	48,647	46	105,957
Coimbatore, North ..	4	1,120	..	..	4	510	46	15,122	45	14,250	98	30,266
Do. Central ..	7	227	1	30	1	6	20	687	5	70	34	906
Do. South ..	4	75	..	..	5	477	28	2,372	..	..	36	4,663
Total ..	31	12,552	3	130	25	1,713	240	33,082	154	67,601	507	177,779
Grand total ..	211	48,445	33	21,199	97	67,482	724	219,210	762	253,976	1750	716,280
Grand total for 1912–13 ..	158	31,350	34	11,752	68	57,376	578	159,595	637	428,379	1420	664,069

(*a*) Includes 17,959 acres burnt in unprotected blocks.

* Excludes three fires in unreserved lands—one in North Salem and two in Trichinopoly.

† Includes the number of fires in the areas not under special protection.

APPENDIX E.—Comparative statement of impounded cattle (1913–14).

District.	From open forests.		From closed forests.				Total.		Average for three years ending 1913–1914.
			Holding permits for open forests.	Having no permits.	Holding permits for open forests.	Having no permits.			
	1912-13.	1913–14.	1912–13.		1913–14.		1912–13.	1913–14.	
1	2	3	4	5	6	7	8	9	10
Northern Circle.									
Ganjām ..	1,883	584	..	290	..	268	2,173	852	3,216
Vizagapatam ..	786	962	..	80	..	232	866	1,194	1,950
Gōdāvari, Uppper	53	386	..	..	..	..	53	386	254
Do. Lower	513	442	312	418	4	351	1,243	797	1,243
Kistna	1,891	876	686	1,146	918	935	3,723	2,729	3,872
Kurnool, East ..	4,210	9,937	..	..	..	..	4,210	9,937	4,716
Do. South ..	1,614	1,455	121	246	251	1,345	1,981	3,049	5,891
Do. West ..	9,418	14,198	..	1,514	70	769	10,932	15,037	12,587
Total ..	20,368	28,840	1,119	3,694	1,243	3,898	25,181	33,981	33,729
Central Circle.									
Bellary ..	13,671	7,320	2,100	3,204	585	5,892	18,975	15,797	15,994
Anantapur ..	8,469	6,751	210	2,131	388	2,720	10,810	9,859	9,911
Guntūr ..	16,576	8,876	..	10,263	2,449	8,211	26,839	19,536	24,255
Cuddapah, West.	3,982	6,731	327	2,071	497	4,644	6,380	11,872	8,468
Do. East ..	2,425	2,459	65	3,188	117	3,055	5,678	5,631	5,644
Nellore	8,361	6,653	3,714	6,838	99	10,973	18,913	17,725	18,142
Chingleput ..	3,526	2,918	42	654	31 (a)377	1,368	4,222	4,694	4,508
Chittoor	(b) 2,899	3,078	(b) 2,054	(b) 3,347	1,863	4,582	8,300	9,523	9,234
Total ..	59,909	44,786	8,512	31,696	6,406	41,445	100,117	92,637	96,156
Southern Circle.									
North Vellore ..	6,487	2,819	620	* 2,354	514	3,998	9,461	7,331	8,744
South do. ..	4,736	3,338	760	1,683	283	992	7,179	4,613	6,159
South Arcot ..	† 4,602	4,316	295	† 10,212	841	10,663	15,109	15,820	15,045
North Salem ..	3,036	2,698	206	1,190	191	1,984	4,432	4,873	4,407
South do. ..	2,201	1,555	220	1,900	261	2,031	4,321	3,847	3,546
Trichinopoly *cum* Tanjore	6,321	3,162	1,508	..	5,958	..	7,829	9,120	8,172
Madura	3,720	1,986	294	2,590	316	3,532	6,604	5,834	6,669
Tinnevelly *cum* Rāmnād	1,168	1,970	137	702	505	1,188	2,007	3,663	3,317
Total ..	32,271	21,844	4,040	20,631	8,869	24,388	56,942	55,101	56,059
Western Circle.									
South Canara ..	887	573	11	89	13	23	987	609	978
Malabar, North ..	95	30	..	..	..	..	95	30	144
Do. South ..	..	..	..	164	..	81	164	81	163
The Nilgiris ..	372	71	160	103	52	255	635	378	585
Kollegal ..	2,930	2,512	249	359	189	687	3,538	3,388	3,078
Coimbatore, North.	4,058	1,713	168	1,111	..	348	5,337	2,061	3,713
Do. Central.	933	417	..	1,709	..	570	2,642	987	2,350
Do. South.	131	832	26	613	57	510	770	1,399	748
Total ..	9,406	6,148	614	4,148	311	2,474	14,168	8,933	11,759
Grand total ..	121,954	101,618	14,285	60,169	16,829	72,205	196,408	190,652	197,703

(*a*) Represents number of cattle grazed in closed coupes holding permits for open areas for which the permits for the open area were cancelled instead of impounding them for breach of permit rules.

(*b*) Revised figures furnished by the Collector.

* Two thousand and fifty-four shown in the previous year's return is stated to be an error.

† As now revised by the Collector.

ANNUAL FORM No. 65.

Forest Department, Madras Presidency.

AREA of reserved forests and reserved lands during 1913–14.

District.	Area of reserved forests.					
	Area on 1st July 1913.		Added during the year.	Excluded during the year.	Area on 30th June 1914.	
	Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.
1	2	3	4	5	6	7
Northern Circle.						
Ganjam	360,871	564	3,261	..	364,132	569
Vizagapatam	193,832	303	..	..	193,832	303
Godavari, Upper	273,751	428	..	..	273,751	428
Do. Lower	258,638	404	..	362	258,276	404
Kistna	178,231	278	..	903	177,328	277
Kurnool, East	640,439	1,001	1,123	1,260	640,302	1,000
Do. South	497,664	778	8,184	15,409	490,439	766
Do. West	549,274	858	5,797	..	555,071	867
Total ..	2,952,700	4,614	18,365	17,934	2,953,131	4,614
Central Circle.						
Bellary	400,539	626	835	13	401,361	627
Anantapur	475,321	743	..	..	475,321	743
Guntur	521,247	814	..	..	521,247	814
Cuddapah, West	470,073	734	..	..	470,073	734
Do. East	693,364	1,083	..	..	693,364	1,083
Nellore	476,463	745	1,023	5,485	472,001	738
Chingleput	133,973	209	..	..	133,973	209
Chittoor	537,419	840	..	264	537,155	840
Total ..	3,708,399	5,794	1,858	5,762	3,704,495	5,788
Southern Circle.						
North Vellore	319,170	499	7	6,114	313,063	489
South do.	476,847	745	..	19,064	457,783	715
South Arcot	221,126	345	..	5,330	215,796	337
North Salem	507,374	792	..	..	507,374	792
South do.	371,762	581	..		371,762	581
Trichinopoly *cum* Tanjore	227,736	356	..	742	226,994	355
Madura	426,210	666	..	3,322	422,888	661
Tinnevelly *cum* Ramnad	274,298	429	(a) 35	33	274,300	429
Total ..	2,824,523	4,413	42	34,605	2,789,960	4,359
Western Circle.						
South Canara	510,563	798	27	..	510,590	798
Malabar, North	167,361	261	623	199	167,785	262
Do. South	69,263	108	142	..	69,405	108
The Nilgiris	305,882	478	42	1,940	303,984	475
Kollegal	286,254	447	180,912	..	467,166	730
Coimbatore, North	589,209	921	742	..	589,951	922
Do. Central	225,824	353	241	133	225,932	353
Do. South	290,628	454	24	..	290,652	454
Total ..	2,444,984	3,820	182,753	2,272	2,625,465	4,102
Grand total ..	11,930,606	18,641	2,03,018	60,573	12,073,051	18,863

(a) The difference of 33 acres is due to the exclusion of 33 acres from reservation in Khansapuram reserve.

Area of reserved forests and reserved lands during 1913–14—*cont.*

District.	Area of reserved lands.						Total area of reserved forests and reserved lands in square miles.
	Area on 1st July 1913.		Added during the year.	Excluded during the year.	Area on 30th June 1914.		
	Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
	8	9	10	11	12	13	14
Northern Circle.							
Ganjām	47,741	75	..	3,261	44,480	70	639
Vizagapatam	(c) 7,360	11	468	1,101	6,727	(b) 10	313
Gōdāvari, Upper	63,178	99	163,311	..	226,489	354	782
Do. Lower	47,955	75	..	..	47,955	75	479
Kistna	2,801	4	..	2,801	..	..	277
Kurnool, East	..	..	..	..	..	..	1,000
Do. South	88	(a) ..	3	22	69	(a) ..	766
Do. West	6	(a)	..	6	..	..	867
Total ..	169,129	264	163,782	7,191	325,720	509	5,123
Central Circle.							
Bellary	40,858	64	..	835	40,023	63	690
Anantapur	6,953	11	..	375	6,578	10	753
Guntūr	..	..	..	..	..	..	814
Cuddapah, West	..	..	..	..	..	..	734
Do. East	..	..	107	..	107	..	1,083
Nellore	7	..	..	7	..	..	738
Chingleput	19	..	..	..	19	..	209
Chittoor	16	..	5	..	21	..	840
Total ..	47,853	75	112	1,217	46,748	73	5,861
Southern Circle.							
North Vellore	80	..	..	7	73	..	489
South do.	..	..	27	..	27	..	715
South Arcot	..	..	..	..	..	..	337
North Salem	29,290	46	..	..	29,290	46	838
South do.	3,790	6	7,830	..	11,620	18	599
Trichinopoly *cum* Tanjore	2,146	3	2,464	..	4,610	7	362
Madura	16	..	4	..	20	..	661
Tinnevelly *cum* Rāmnād	140	..	..	(d) 68	72	..	429
Total ..	35,462	55	10,325	75	45,712	71	4,430
Western Circle.							
South Canara	31	..	342	27	346	1	799
Malabar, North	645	1	291	623	313	..	262
Do. South	35,223	55	..	298	34,925	55	163
The Nilgiris *	52,569	82	..	61	52,508	82	557
Kollegal	181,043	283	358	180,912	489	1	731
Coimbatore, North	769	1	102	742	129	..	922
Do. Central	6,086	10	557	241	6,402	10	363
Do. South	24	..	142	24	142	..	454
Total ..	276,390	432	1,792	182,928	95,254	149	4,251
Grand total ..	5,28,834	826	1,76,011	1,91,411	5,13,434	802	19,665

* Includes 2,918 acres of Toda patta lands.

(a) Less than half a square mile.
(b) Includes 2·05 square miles of Karkavalasa leased forests and its east and west blocks.
(c) 844·80 acres of Karkavalasa leased forests east and west blocks were wrongly omitted in previous returns.
(d) The difference of 33 acres is due to the exclusion of 33 acres from reservation in Khansapuram reserve.

Area of reserved forests and reserved lands during 1913–14.

District.	Name of forests.	Area on 1st July 1913. Acres.	Area on 1st July 1913. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to otherheads. Acres.	Area on 30th June 1914. Acres.	Area on 30th June 1914. Equivalent in square miles.	Number and date of notification of addition or transfer.
				NORTHERN CIRCLE.				
				Reserved forests.				
Ganjam.	Area notified in previous years.	360,871	564	..	..	360,871	563·86	
	Added—							
	Budarangu	..	..	738·10	..	738·10	1·15	No. 217, dated 30th April 1913.
	Chamunda	..	..	564·94	..	564·94	0·88	No. 242, dated 10th May 1913.
	Nagiri	..	..	1,140·90	..	1,140·90	1·78	
	Sollundi	..	..	816 64	..	816·64	1·28	
	Total ..	360,871	564	3,260·58 or 3,261	..	364,131·58 or 364,132	568·95 or 569	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years.	47,741	75	..	..	47,741	74·60	
	Excluded—							
	Budarangu	..	..	..	738·10	738·10	1·15	Transferred to reserved forests.
	Chamunda	..	..	..	564·94	564·94	0·88	
	Nagiri	..	..	..	1,140·90	1,140·90	1·78	
	Sollundi	..	..	..	816·64	816·64	1·28	
	Total exclusion ..	..	..	..	3,260·58 or 3,261	3,260·58 or 3,261	5·09	
	Net area ..	47,741	75	..	3,261or5·09 sq. mls.	44,480	69·51 or 70	
	Reserved forests.							
	Area notified in previous years..	193,832	303	..	..	193,832	303	
	Reserved lands not transferred to reserved forests during the year.							
Vizagapatam.	Area notified in previous years ..	(*a*) 7,359·80	11·50	..	..	7,359·80	11·50	(*a*) 732·80 acres and 112·00 acres of east and west blocks respectively, of Karakavalasa leased forests not shown in previous district returns by mistake.
	Added—							
	Karakavalasa Leased forests.	..	..	468	..	468	0·73	No. 16, dated 8th December 1913.
	Total ..	7,359·80	11·50	468	..	7,827·80	12·23	
	Excluded—							
	Saragudu Block VI (portion) ..	..	..	..	(*b*) 1,101	1,101	1·72	(*b*) Excluded during settlement.
	Net area ..	7,359·80 or 7,360	11·50 or 11	468	1,101	6,726·80 or 6,727	10·51 or 10	
	Reserved forests.							
	Area notified in previous years.	273,751	428	..	..	273,751	428	
	Reserved lands not transferred to reserved forests during the year.							
Godāvari, Upper.	Area notified in previous years.	63,178·20	98·71	..	..	63,178·20	98·71	
	Added—							
	Kansulur reserve, Vendalurgondi Extension I	..	..	524	..	524	0·82	No. 411, dated 21st August 1913.
	Dhanukonda Extension IV to the Rekapalli Hill reserve ..	..	..	979	..	979	1·53	No. 412, dated 21st August 1913.
	Walsugriva reserve, Korrijula gudem Extension I ..	..	..	1,235	..	1,235	1·93	No. 413, dated 21st August 1913.
	Gummadakonda Extension III to the Rekapalli Hill reserve	..	..	1,539	..	1,539	2·40	No. 414, dated 21st August 1913.
	Marrigura reserve, Busipakalu enclosure	..	..	1,200	..	1,200	1·88	No. 487, dated 14th October 1913.
	Nugur block	..	..	157,833·44	..	157,833·44	246·61	No. 102, dated 16th February 1914.
	Total ..	63,178·20 or 63,178	98·71 or 99	163,310·44 or 163,311 or 255·17 sq. mls.	..	226,488·64 or 226,489 or 353·88 sq. mls.	353·88 or 354	

Area of reserved forests and reserved lands during 1913–14—*cont.*

District.	Name of forests.	Area on 1st July 1913.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1914.		Number and date of notification of addition or transfer.
		Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
	NORTHERN CIRCLE—*cont.*							
	Reserved forests.							
Godavari, Lower.	Area notified in previous years ..	258,638	404	..	..	258,638	404·12	
	Excluded—							
	Bendamurlanka	..	..	..	362·14 or 362	362	0·56	No. 73, dated 26th January 1914.
	Net area ..	258,638	404	..	362	258,276	403·56 or 404	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years ..	47,955	75	..	..	47,955	75	
	Reserved forests.							
Kistna.	Area notified in previous years ..	178,231	278	..	..	178,231	278	
	Excluded—							
	Gudimetla (portion) ..	..	..	..	460	460	0·72	No. 415, dated 21st August 1913.
	Narasapur	..	..	..	59	59	0·09	No. 163, dated 7th March 1914.
	Vanadurra	..	..	..	67	67	0·10	No. 164, dated 7th March 1914.
	Bomminampad	..	..	..	26	26	0·04	No. 165, dated 7th March 1914.
	Vemavarappad	..	..	..	16	16	0·03	No. 166, dated 7th March 1914.
	Gopuvanipalem	..	..	..	187	187	0·29	No. 167, dated 7th March 1914.
	Do. Extension II.	..	..	..	88	88	0·14	No. 168, dated 7th March 1914.
	Total exclusion ..	..	..	..	903	903	1·41 or 1	
	Net area ..	178,231	278	..	903	177,328	277	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years ..	2,801	4	..	..	2,801	4·38	
	Excluded—							
	Pedalanka block I	..	..	..	1,618	1,618	2·53	These areas already notified under section 26 are now excluded *vide* Board's Proceedings, Forest No. 787, Mis., dated 18th August 1913.
	Do. II	..	..	..	1,183	1,183	1·85	
	Total exclusion ..	..	..	..	2,801	2,801	4·38	
	Net area ..	2,801	4	..	2,801	..	..	
	Reserved forests.							
Kurnool, East.	Area notified in previous years ..	640,439	1,001	..	..	640,439	1,000·67	
	Added—							
	Millampalli	..	..	74	..	74		Rectification of area due to adoption of India Survey figures.
	Eastern Nallamalais IX ..	..	..	18	..	18		
	Do. V.	..	..	128	..	128	1·76	
	Ambavaram	..	..	128	..	128		
	Eastern Nallamalais III ..	..	..	775	..	775		
	Total ..	..	..	1,123	..	1,123	1·76	
	Excluded—							
	Ganapavaram	..	..	..	1,190	1,190		Do.
	Eastern Nallamalais II ..	..	..	..	70	70		
	Chinaganapalli (portion) ..	..	..	..	0·065	0·065	1·97	Disafforested. Notification No. 434, dated 22nd August 1913.
	Total exclusion ..	..	..	..	1,260·065 or 1,260	1,260	1·97	
	Net area ..	640,439	1,001	1,123	1,260	640,302	1,000·46 or 1,000	

Area of reserved forests and reserved lands during 1913-14—*cont.*

District.	Name of forests.	Area on 1st July 1913.		Added during the year.	Excluded or transferred to other heads	Area on 30th June 1914.		Number and date of notification of addition or transfer.
		Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
	NORTHERN CIRCLE—*cont.*							
Kurnool, East—*cont.*	*Reserved lands transferred to reserved forests during the year*—Nil.							
	Reserved forests.							
	Area notified in previous years..	497,664	778	..	..	497,664	777·60	
	Added—							
	Owk Extension II	..	..	4·45	..	4·45	0·007	No. 312, dated 23rd June 1913.
	Jaladurgam additions I and II.	..	..	..	..	..	..	
	Block I	..	..	5·46	..	5·46	0·008	No. 170, dated 10th March 1914.
	Do. II	..	..	12·02	..	12·02	0·019	
	Sirvel reserved forests (portion).	..	..	0·20	..	0·20	0·0003	Rectification of area due to adoption of India Survey figures.
	Sirvel addition I (Kothakonda).	..	..	0·40	..	0·40	0·0006	
	Sirvel addition II (Ahobilam).	..	..	6,640·00	..	6,640·00	10·38	
	Sirvel addition III (Bachepalli).	..	..	0·80	..	0·80	0·001	
	North Veligonda Extension I.	..	..	563·00	..	563·00	0·88	
	West Veligonda reserved forests.	..	..	386·97	..	386·97	0·60	
	Maduva	..	..	569·00	..	569·00	0·89	
	Uyyalavada Extension II (Mundlapad).	..	..	0·40	..	0·40	0·0006	
	Uyyalavada addition ..	..	..	0·40	..	0·40	0·0006	
	Do. reserved forests (portion).	..	..	0·40	..	0·40	0·0006	
	Total ..	..	..	8,183·50 or 8,184	..	8,183·50 or 8,184	12·7877 or 12·789	
	Excluded—							
	Peddapaya (portion) ..	..	..	..	0·33	0·33	0·005	No. 504, dated 1st November 1913.
	Pyapalli Extension II (portion).	..	..	..	0·42	0·42	0·007	No. 521, dated 1st November 1913.
Kurnool, South.	North Veligonda reserved forest.	..	..	..	6,029 03	6,029·03	9·42	Rectification of area due to the adoption of India Survey figures.
	South Veligonda blocks I and II.	..	..	..	3,362·04	3,362·04	5·25	
	Do. Extension	..	..	..	226·00	226·00	0·35	
	Gazulapalli reserved forest.	..	..	..	256·00	256·00	0·40	Transferred to Kurnool, West, due to alteration in the division boundary.
	Nandyal reserved forest (portion).	..	..	..	5,534·80	5,534·80	8·65	
	Total exclusion ..	..	..	..	15,408·62 or 15,409	15,409	24·082	
	Net area ..	497,664	778	8,184	15,409	490,439	766·31 or 766	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years..	* 87·93	0·137	..	..	87·93	0·137	* Revision year's figure rectified.
	Added—							
	Pyapalli addition I	..	..	3·26	..	3·26	0·005	No. 88, dated 2nd February 1914.
	Total ..	87·93	0·137	3·26	..	91·19	0·142	
	Excluded—							
	Owk Extension II	..	..	..	4·45	4·45	0·007	Transferred to reserved forests.
	Jaladurgam additions I and II.							
	Block I	..	..	..	5·46	5·46	0 008	
	Do. II	..	..	..	12·02	12 02	0 019	
	Total exclusion ..	..	..	..	21·93 or 22	21·93 or 22	0·034	
	Net area ..	87·93 or 88	0·137	3·26 or 3	21·93 or 22	69·26 or 69	0·108 or *Nil.*	

Area of reserved forests and reserved lands during 1913-14—*cont.*

District.	Name of forests.	Area on 1st July 1913. Acres.	Area on 1st July 1913. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads Acres.	Area on 30th June 1914. Acres.	Area on 30th June 1914. Equivalent in square miles.	Number and date of notification of addition or transfer.
				NORTHERN CIRCLE—*cont.*				
				Reserved forests.				
Kurnool, West.	Area notified in previous years..	549,274	858	..	..	549,274	858·24	
	Added—							
	Panem addition	..	..	6·17	..	6·17	0·01	No. 360, dated 19th July 1913.
	Nandyal	..	..	5,534·80	..	5,534·80	8·65	Transferred from Kurnool, South, owing to alteration in the division boundary.
	Do. addition No. I(Gazulapalli).	..	..	256·00	..	256·00	0·40	
	Total ..	549,274	858	5,796·97 or 5,797	..	555,070·97 or 555,071	867·30 or 867	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years..	6·17	0·01	..	6·17	..	..	Transferred to reserved forests.
				CENTRAL CIRCLE.				
				Reserved forests.				
Bellary.	Area notified in previous years ..	400,539	626	..	..	400,539	626	
	Add—Additions to Adōni East and West reserves.	..	..	217	..	217	1	Board's Proceedings, Forest No. 253, dated 18th December 1913.
	Sandal area near Chilkanbatti ..	..	..	618	..	618		Board's Proceedings, Forest No. 63, dated 24th March 1914.
	Total ..	400,539	626	835	..	401,374	627	
	Deducted—from Sulikeri.. .	..	..	..	13	13	..	Board's Proceedings, Forest No. 2, dated 5th January 1914.
	Net area ..	400,539	626	835	13	401,361	627	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years ..	40,858	64	..	..	40,858	64	
	Deduct	..	..	..	835	835	1	Transferred to reserved forests.
	Net area ..	40,858	64	..	835	40,023	63	
	Reserved forests.							
Anantapur.	Area notified in previous years ..	475,321	743	..	..	475,321	743	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years..	6,953	11	..	..	6,953	11	
	Deduct—Budikonda extension ..	..	..	..	375	375	1	Reservation cancelled—Board's Proceedings, Forest No. 175, dated 25th August 1913.
	Net area ..	6,953	11	..	375	6,578	10	
	Reserved forests.							
	Area notified in previous years ..	521,247	814	..	..	521,247	814	
	Reserved lands not transferred to reserved forests during the year —Nil.							
	Reserved forests.							
West Cuddapah.	Area notified in previous years..	470,073	734	..	..	470,073	734	
	Reserved lands not transferred to reserved forests during the year—Nil.							
	Reserved forests.							
East Cuddapah.	Area notified in previous years ..	693,364	1,083	..	..	693,364	1,083	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years ..	..	..	..	..	..	..	
	Add—Sancherla extension C. ..	..	..	107	..	107	..	Board's Proceedings, Forest No. 166, dated 12th August 1913.
	Net area ..	..	..	107	..	107	..	

Area of reserved forests and reserved lands during 1913-14—*cont.*

District.	Name of forests.	Area on 1st July 1913. Acres.	Area on 1st July 1913. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1914. Acres.	Area on 30th June 1914. Equivalent in square miles.	Number and date of notification of addition or transfer.
	CENTRAL CIRCLE—*cont.*							
	Reserved forests.							
Nellore.	Area notified in previous years ..	476,463	745	..	..	476,463	745	
	Deduct—Vedullacheruvu (portions).	..	..	..	187	187		Disafforested—Board's Proceedings, Forest No. 191, dated 10th September 1913.
	Additions and exclusions ..	..	..	1,023	5,291	4,268	7	Due to verification of boundaries and correct computation of areas in connection with the preparation of Kavali working-plan, etc.
	Deduct—Difference in area ..	..	..	.	7	7		Due to correction of area given in the last year's return as reported by the Collector.
	Net area ..	476,463	745	1,023	5,485	472,001	738	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years ..	7	..	..	..	7	..	
	Deduct—Addition to Utukur-Varini Block C.	..	..	..	7	..	..	Reservation cancelled—Board's Proceedings, Forest No. 698, Mis., dated 4th July 1913.
	Net area ..	7	..	..	7	7	..	
	Reserved forests.							
Chingleput	Area notified in previous years ..	133,973	209	..	..	133,973	209	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years ..	19	..	..	..	19	..	
	Reserved forests.							
Chittoor.	Area notified in previous years ..	537,419	840	..	..	537,419	840	The areas of reserves referred to in notification No. 430, dated 10th September 1913, have been already deducted.
	Deduct—Potapolu	..	..	..	264	264	..	Board's Proceedings (Land Revenue), No. 1436, Mis., dated 2nd April 1914.
	Net area ..	537,419	840	..	264	537,155	840	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years ..	16	..	..	..	16	..	
	Add—Addition to Whiteside garden.	..	..	3	..	3	..	Board's Proceedings, Forest No. 202, dated 23rd September 1913.
	Addition to Marella extension..	..	..	1	..	1	..	Board's Proceedings, Forest No. 260, dated 23rd December 1913.
	Do. reserve ..	..	..	1	..	1	..	
	Net area ..	16	..	5	..	21	..	
	SOUTHERN CIRCLE.							
	Reserved forests.							
North Vellore.	Area notified in previous years ..	319,170	499	..	..	..	..	
	Added—							
	Survey Nos. 249, 250 and 251 of Kemparajapuram village, Thiruvallam plantation.	..	..	7	..	..	..	G.O. No. 1345, Revenue, dated 8th May 1913.
	Excluded—							
	Enclosures on the Javadis ..	..	..	..	6,114	..	..	G.O. No. 1370, Revenue, dated 10th May 1913.
	Total ..	319,170	499	7	6,114	313,063	489	

Area of reserved forests and reserved lands during 1913–14—*cont.*

District.	Name of forests.	Area on 1st July 1913. Acres.	Area on 1st July 1913. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1914. Acres.	Area on 30th June 1914. Equivalent in square miles.	Number and date of notification of addition or transfer.
	SOUTHERN CIRCLE—*cont.*							
	Reserved lands not transferred to reserved forests during the year.							
North Vellore—*cont.*	Area notified in previous years ..	80	..	..	..	..	..	
	Excluded—							
	Transferred to reserved forests.	..	..	..	7	..	..	
	Net area ..	80	..	..	7	73	..	
	Reserved forests.							
South Vellore	Area notified in previous years ..	476,847	745	..	..	..	..	
	Excluded—							
	Javadis enclosures	..	..	..	19,064	..	..	G.O. No. 1370, Revenue, dated 10th May 1913.
	Net area ..	476,847	745	..	19,064	457,783	715	
	Reserved lands not transferred to reserved forests during the year.							
	Added—							
	Singarapet extension (survey Nos. 129 and 130 of Sembarai village).	..	..	22·30	..	..	..	G.O. No. 1621, Revenue, dated 4th June 1914.
	Andiappanur reserve (survey Nos. 260 and 261 of Andiappanur village).	..	..	4 46	..	..	..	G.O. No. 1571, Revenue, dated 29th May 1914.
	Total ..	..	..	26·76 or 27	..	26·76 or 27	..	
	Reserved forests.							
South Arcot.	Area notified in previous years ..	221,126	345	..	..	..	..	
	Excluded—							
	Talankoda	..	..	..	201·6	..	..	G.O. No. 1590, Revenue, dated 30th May 1913.
	Shonankuppam	..	..	..	98·6	..	..	
	Dhoni Durai, South ..	..	..	..	91	..	..	
	Do. North	..	..	..	42	..	..	
	Nochikadu	..	..	..	640	..	..	
	Kammapuram	..	..	..	1,377	..	..	G.O. No. 2530, Revenue, dated 22nd August 1913.
	Periyakuppam	..	..	..	1,580	..	..	G.O. No. 275, Revenue, dated 27th January 1914.
	Periyapattu	..	..	..	1,130	..	..	
	Fort St. David	..	..	..	44	..	..	
	Naboh's tope	..	..	..	46·5	..	..	G.O. No. 1086, Revenue, dated 10th April 1914.
	Sankarapuram, South ..	..	..	..	7·31	..	..	
	Do. North ..	..	..	..	31	..	..	
	Kattuvananjur tope	..	..	..	30	..	..	
	Puttai tope	..	..	..	11	..	..	
	Net area ..	221,126	345	..	5,330·01 or 5,330	215,796	337	
	Reserved lands not transferred to reserved forests during the year—Nil.							
	Reserved forests.							
North Salem.	Area notified in previous years ..	507,374	792	..	..	507,374	792	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years ..	29,290	46	..	..	29,290	46	
	Reserved forests.							
South Salem.	Area notified in previous years ..	371,762	581	..	..	371,762	581	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years ..	3,790	6	..	..	..	..	
	Added—							
	Jarugumalai	..	..	7,830	..	..	..	G.O. No. 3705, Revenue, dated 17th December 1913.
	Total ..	3,790	6	7,830	..	11,620	18	

Area of reserved forests and reserved lands during 1913-14—*cont.*

District.	Name of forests.	Area on 1st July 1913.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1914.		Number and date of notification of addition or transfer.
		Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
	SOUTHERN CIRCLE—*cont.*							
	Reserved forests.							
Trichinopoly *cum* Tanjore.	Area notified in previous years ..	227,736	356	..	..	..	..	
	Excluded—							
	North casuarina plantation.	..	..	..	350	..	..	G.O. No. 478, Revenue, dated 13th February 1914.
	South casuarina plantation.	..	..	..	250	..	..	
	Neidavasal	..	..	..	42	..	..	
	North casuarina extension.	..	..	..	100	..	..	
	Net area ..	227,736	356	..	742	226,994	355	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years ..	2,146	3	..	..	..	..	
	Added—							
	Gundur extension	..	..	2,464	..	..	..	G.O. No. 3748, Revenue, dated 20th December 1913.
	Total ..	2,146	3	2,464	..	4,610	7	
	Reserved forests.							
Madura.	Area notified in previous years ..	426,210	666	..	..	..	..	
	Excluded on account of recomputation of areas of reserves investigated by the Special Deputy Collector.	..	..	..	3,322	..	..	
	Net area ..	426,210	666	..	3,322	422,888	661	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years ..	16	..	..	..	..	..	
	Added—							
	Southern slopes	..	..	4	..	..	..	G.O. No. 197, Revenue, dated 20th January 1914.
	Adukkam	..	..	0·43	..	..	..	G.O. No. 1186, Revenue, dated 27th April 1914.
	Total ..	16	..	4·43 or 4	..	20	..	
	Reserved forests.							
Tinnevelly *cum* Rāmnād.	Area notified in previous years ..	274,298	429	..	..	..	..	
	Added—							
	Alagapuri	..	..	0·25	..	..	..	G.O. No. 3137, Revenue, dated 31st October 1913.
	Valaikulam	..	..	6	..	..	..	G.O. No. 2977, Revenue, dated 9th October 1913.
	Khansapuram	..	..	6	..	..	..	G.O. No. 274, Revenue, dated 27th January 1914.
	Addition to reserved forest II (*b*) in Vikramasinghapuram	..	..	2	..	..	..	G.O. No. 3947, Revenue, dated 28th November 1913.
	Last bit of Nadugani ..	..	..	1	..	..	..	G.O. No. 2101, Revenue, dated 14th July 1913.
	Addition VI to Kottamadakki reserved forest.	..	..	20	..	..	..	G.O. No. 2103, Revenue, dated 14th July 1913.
	Excluded—							
	Milavittan	..	..	..	33	..	..	G.O. No. 3544, Revenue, dated 2nd December 1913.
	Papanasam - Alwarkurichi ghat forests lower slopes II (*b*).	..	..	..	0·08	..	..	Erratum in G.O. No. R. 497, Revenue, dated 13th June 1914.
	Net area ..	274,298	429	35·25 or 35	33·08 or 33	274,300	429	

Area of reserved forests and reserved lands during 1913-14—*cont.*

District.	Name of forests.	Area on 1st July 1913. Acres.	Area on 1st July 1913. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1914. Acres.	Area on 30th June 1914. Equivalent in square miles.	Number and date of notification of addition or transfer.
	SOUTHERN CIRCLE—*cont.*							
	Reserved lands not transferred to reserved forests during the year.							
Tinnevelly *cum* Ramnad—*cont.*	Area notified in previous years.	140	..	..	..	..	..	
	Transferred to reserved forests ..	..	..	..	35	..	..	
	Excluded at settlement of Khansapuram.	..	..	..	33	..	..	
	Net area ..	140	..	..	68	72	..	
	WESTERN CIRCLE.							
	Reserved forests.							
	COONDAPOOR.							
	Baindoor extension I	..	..	2	..	2	..	No. 555, dated 17th November 1913.
	Do. do. II	..	..	5	..	5	..	
	KASARAGOD.							
	Aletti addition II	..	..	14	..	14	..	No. 207, dated 3rd April 1914.
	Do. do. III	..	..	6	..	6	..	
	Area notified in previous years ..	510,563	..	..	..	510,563	..	
	Total ..	510,563	798	27	..	510,590	798	
	Reserved lands not transferred to reserved forests during the year.							
	COONDAPOOR.							
South Canara.	Mudagalpare extension I ..	..	..	13	..	13	..	No. 482, dated 2nd October 1913.
	Madibare extension I	..	..	92	..	92	..	No. 368, dated 29th June 1914.
	Do. do. II							
	SANKARANARAINA.							
	Ballimane extension III ..	..	..	202	..	202	..	No. 68, dated 3rd February 1914.
	Tombettoo extension II	..	..	11	..	11	..	No. 201, dated 30th March 1914.
	MANGALORE.							
	Naravi extension VI	..	..	24	..	24	..	No. 510, dated 31st October 1913.
	Area notified in previous years.	31	..	..	(a) 27	4	..	
	Total ..	31	..	342	27	346	1	
	Reserved forests.							
	BEGUR.							
	Ladysmith additions III and IV.	..	..	623	..	623	..	No. 209, dated 3rd April 1914.
	Area notified in previous years ..	167,361	..	..	(b) 199	167,162	..	
	Total ..	167,361	261	623	199	167,785	262	
	Reserved lands not transferred to reserved forests during the year.							
	KANOTH.							
Malabar, North.	Mangalad estate (Peria addition).	..	..	83	..	83	..	No. 443, dated 8th September 1913.
	BEGUR.							
	Chammattimalai estate (Hilldale addition).	..	..	208	..	208	..	No. 445, dated 8th September 1913.
	Area notified in previous years.	645	..	..	(a) 623	22	..	
	Total ..	645	1	291	623	313	..	
	Reserved forests.							
Malabar, South.	Area notified in previous years ..	69,263	108	(c) 142	..	69,405	108	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years..	35,223	55	..	(c) 298	34,925	55	

(a) Transferred to reserved forests. (b) Adoption of correct area.
(c) Rectification of area due to adoption of Survey of India figures.

Area of reserved forests and reserved lands during 1913–14—*cont.*

District.	Name of forests.	Area on 1st July 1913. Acres.	Area on 1st July 1913. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1914. Acres.	Area on 30th June 1914. Equivalent in square miles.	Number and date of notification of addition or transfer.
				WESTERN CIRCLE—*cont.*				
				Reserved forests.				
	COONOOR.							
The Nilgiris.	Keti valley block	..	..	42	..	42	..	No. 136, dated 2nd March 1914.
	Area notified in previous years..	305,882	..	..	(a) 2, (b) 1,938	303,942	..	No. 478, dated 26th September 1913.
	Total ..	305,882	478	42	1,940	303,984	475	
				Reserved lands not transferred to reserved forests during the year.				
	Area notified in previous years..	49,639	77	..	(c) 42, (d) 7	49,590	77	
				Toda patta lands.				
		2,930	5	..	(e) 12	2,918	5	
				Reserved forests.				
	RAMAPURAM.							
	Madeswaranmalai	..	..	173,920	..	173,920	..	No. 37 of 1914, dated 10th December 1913.
	KOLLEGAL.							
	Mombetta	..	..	6,992	..	6,992	..	No. 95 of 1914, dated 7th February 1914.
	Area notified in previous years..	286,254	..	..	..	286,254	..	
	Total ..	286,254	447	180,912	.	467,166	730	
				Reserved lands not transferred to reserved forests during the year.				
	KOLLEGAL.							
	Hanur addition A	..	..	15	..	15	..	No. 380, dated 7th August 1913.
	Do. B	..	..	1	..	1	..	
	Do. C	..	..	4	..	4	..	No. 226, dated 8th April 1914.
Kollegal.	Chickailur extension 2	..	..	4	..	4	..	No. 313, dated 26th May 1914.
	RAMAPURAM.							
	Cowdalli addition 1	..	..	15	..	15	..	No. 137, dated 2nd March 1914.
	Yedaralli do. 1	..	..	23	..	23	..	No. 180, dated 18th March 1914.
	Do. do. 2	..	..	162	..	162	..	No. 99, dated 2nd February 1914.
	Do. do. 3	..	..	10	..	10	..	No. 181, dated 18th March 1914.
	Do. do. 4	..	..	2	..	2	..	No. 182, dated 18th March 1914.
	Do. do. 5	..	..	19	..	19	..	No. 183, dated 18th March 1914.
	Do. do. 6	..	..	103	..	103	..	No. 184, dated 18th March 1914.
	Area notified in previous years..	181,043	..	..	(c) 180,912	131	..	
	Total ..	181,043	283	358	180,912	489	1	
				Reserved forests.				
	SATYAMANGALAM.							
	Gutialattur extension	..	..	346	..	346	..	No. 96, dated 2nd February 1914.
	TALAMALAI.							
Coimbatore, North.	Talamalai addition	..	..	226	..	226	..	No. 72, dated 27th January 1914.
	BHAVANI.							
	Palamalai addition	..	..	170	..	170	..	No. 61, dated 19th January 1914.
	Area notified in previous years..	589,209	..	..	..	589,209	..	
	Total ..	589,209	921	742	..	589,951	922	

(a) Disafforested.
(b) Rectification due to adoption of surveyed area.
(c) Transferred to reserved forests.
(d) Adoption of correct area.
(e) Wrongly included in previous year's return by the Collector.

Area of reserved forests and reserved lands during 1913-14—*cont.*

District.	Name of forests.	Area on 1st July 1913. Acres.	Area on 1st July 1913. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1914. Acres.	Area on 30th June 1914. Equivalent in square miles.	Number and date of notification of addition or transfer.
	WESTERN CIRCLE—*cont.*							
	Reserved lands not transferred to reserved forests during the year.							
	BHAVANI.							
Coimbatore, North—*cont.*	Enclosures in South Bargur reserve and its additions.	..	..	102	..	102	..	No. 101, dated 4th February 1914.
	Area notified in previous years.	769	..	..	(*a*) 742	27	..	
	Total ..	769	1	102	742	129	..	
	Reserved forests.							
	BOLAMPATTI.							
	Jagir Porathi	..	..	233	..	233	..	No. 527, dated 6th November 1913.
	METTUPALAYAM.							
	Sundapatti addition I	..	..	8	..	8	..	No. 89, dated 2nd February 1914.
	Area notified in previous years.	225,824	..	..	(*b*) 133	225,691	..	Nos. 77 dated 27th January 1914, and 285, dated 30th April 1914.
	Total ..	225,824	353	241	133	225,932	353	
	Reserved lands not transferred to reserved forests during the year.							
Coimbatore, Central.	METTUPĀLAYAM.							
	Survey Nos. 93 A and B of Kammarampalayam (enclosures in Gopinari reserve).	..	..	4	..	4	..	No. 351, dated 12th July 1913.
	Sundapatti additions 2 to 20 ..	..	..	514	..	514	..	No. 76, dated 27th January 1914.
	BOLAMPATTI.							
	Addition to Thadagam block IV.	..	..	39	..	39	..	No. 284, dated 30th April 1914.
	Area notified in previous years.	6,086	..	..	(*a*) 241	5,845	..	
	Total ..	6,086	10	557	241	6,402	10	
	Reserved forests.							
	POLLACHI.							
	Anamalai reserve addition No. I.	..	..	8	..	8	..	No. 162, dated 17th March 1914.
	UDAMALPET.							
	Thalavoipatnam addition ..	..	..	16	..	16	..	No. 529, dated 10th November 1913.
	Area notified in previous years.	290,628	..	..	..	290,628	..	
	Total ..	290,628	454	24	..	290,652	454	
	Reserved lands not transferred to reserved forests during the year.							
Coimbatore, South.	POLLACHI.							
	Additions to Anamalai reserve.	..	..	54	..	54	..	No. 352, dated 11th July 1913.
	PUNACHI.							
	Addition to Punachi reserve No. II	..	..	88	..	88	..	No. 374, dated 24th July 1913.
	Area notified in previous years.	24	..	..	(*a*) 24	..	..	
	Total ..	24	..	142	24	142	..	

(*a*) Transferred to reserved forests. (*b*) Disafforested.

ANNUAL.

Forest Department,

STATEMENT showing the Progress made in, and the

Name of forest district.	Area already settled at commencement of year.	Areas finally settled during the year.					
		Number and date of Government Order according final sanction to the settlement.	Name of forest settled.	Area in square miles.	Expenditure incurred during the year on areas finally settled.		Entire cost per square mile of areas finally settled during the year.
					In forest accounts.	In other accounts.	
1	2	3	4	5	6	7	8
							Northern
	SQ. MLS.				RS.	RS.	RS.
Ganjām ..	569	....	....	..	..	..	..
Vizagapatam.	303	....	....	..	..	..	..
Gōdāvari, Upper.	428	....	....	..	..	..	..
Gōdāvari, Lower.	404	....	....	..	..	..	..
Kistna ..	277	....	....	..	..	..	..
Kurnool, East.	1,000	....	....	..	..	..	..
Kurnool, South.	766	G.O. No. 1855, dated 23rd June 1913, communicated in B.P. No. 144, dated 11th July 1914.	Owk extension II	0·01	..	..	..
		G.O. No. 757, dated 10th March 1914, communicated in B.P. No. 67, dated 13th March 1914.	Jaladurgam addition I ..	0·01			
			Do. do. II ..	0·02			
Kurnool, West.	867	G.O. No. 2154, Revenue, dated 19th July 1913.	Portion of Panem reserve; portion of field No. 434 of Bugganipalli village, Nandyal taluk.	·009	..	..	..
Total ..	4,614			0·049	..	..	..
							Central
Bellary ..	626	G.O. No. 3334, Rev., dated 17th November 1913.	Enclosure to Adoni E. & W. Reserves.	·33	..	..	..
		G.O. No. 688, Rev., dated 5th March 1914.	Sandal area near Chilkanhatti.	·96	..	..	..
		G.O. No. 1559, Rev., dated 28th May 1914.	Enclosure to Neraniki Reserve.	0·04	..	..	..
Anantapur..	743	....	....	..	..	..	..
Guntūr ..	814	....	....	..	..	..	..
Cuddapah West.	734	....	....	..	..	..	..
Cuddapah East.	1,083	....	....	..	..	..	..
Nellore ..	(a) 738	....	....	..	..	..	..
Chingleput.	209	....	....	..	..	..	..
Chittoor ..	840	....	....	..	..	..	..
Total ..	5,787			1·33	..	..	..

NOTE (*Northern and Central Circles*).—This estimate includes all reserved lands under section 26 and unreserved lands.

(a) As per correct computation of areas and verification of boundaries.

FORM No. 66.

Madras Presidency.

Expenditure incurred on, Forest Settlements during 1913–14.

Areas undergoing settlement.						Estimate of areas in which settlement operations have not yet commenced.
At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing settlement.		
Name of tract.	Area in square miles.	Name of tract.	Area in square miles.	In forest accounts.	In other accounts.	
9	10	11	12	13	14	15
Circle.				RS.	RS.	SQ. MLS.
Chokkapad	69·50	....	..	..	..	..
Sarugudu block VI	* 8·43	....	..	..	..	..
Pedamidisileru	96·48	Nugur block	246·61			
Pedakonda extension I ..	1·23	Marrigura reserve, Busipakalu enclosure.	1·875			
Tulluvada extension V ..	0·50	Valsugri reserve, Korrajulagudem extension I.	1·93			
Enukuru extension II ..	0·50	Gummadakanda extension III to the Rekapalli hill reserve.	2·40	..	..	..
		Dhanukonda extension IV to the Rekapalli hill reserve.	1·53			
		Kansulur reserve, Vandalurgondi extension I.	·82			
Coringa extension	75	....	..	..	..	..
....	..	....	..	..	..	..
....	..	....	..	..	..	..
West Veligonda extension I ..	0·103	Pyapalli addition I	0·005	..	..	..
....	..	....	..	..	..	..
	251·743		255,170	..	..	..
Circle						
....	..	....	..	..	..	..
....	..	....	..	..	..	..
....	..	....	..	..	..	..
Yerrakonda extension No. II.	9·80	....	..	..	..	..
Bhadrapur extension	0·56	....	..	..	..	..
....	..	....	..	..	..	..
....	..	....	..	..	..	..
....	..	Sancherla extension C. ..	0·167	..	..	..
....	..	....	..	..	..	..
Perungoli extension No. II ..	0·02	....	..	..	..	..
Nandambakkam extension No. II.	0·01	....	..	..	..	..
Bommasamudram C addition.	0·025	Addition to Whiteside's garden.	0·004	..	..	..
		Addition to Marella extension and addition to Marella reserve.	0·004	..	..	..
	10·415		0·175	..	..	..

* 1·72 square miles of area given in previous years were excluded at settlement.

Statement showing the Progress made in, and the Expenditure

Name of forest district.	Area already settled at commencement of year.	Areas finally settled during the year.					
		Number and date of Government Order according final sanction to the settlement.	Name of forest settled.	Area in square miles.	Expenditure incurred during the year on areas finally settled.		Entire cost per square mile of areas finally settled during the year.
					In forest accounts.	In other accounts.	
1	2	3	4	5	6	7	8
							Southern
	SQ. MLS.				RS.	RS.	RS.
Vellore, North.	(a) 489	G.O. No. 1345, Rev., dated 8th May 1913.	Survey Nos. 249, 250 and 251 of Kemparajapuram village.	0·0105	..	..	..
Vellore, South.	(a) 715	....	....	..	..	..	..
Arcot, South.	(a) 337	....	....	..	..	..	..
Salem, North.	792	....	....	..	..	..	..
Salem, South.	581	....	....	..	..	..	..
Trichinopoly *cum* Tanjore.	(a) 355	....	....	..	..	..	..
Madura ..	(b) 661	....	....	..	..	..	..
Tinnevelly *cum* Ramnad.	429	G.O. No. 2977, Rev., dated 9th October 1913.	Valaikulam addition	0·009	..	..	..
	..	G.O. No. 274, Rev., dated 27th January 1914.	Khansapuram	(c)0·009	..	..	..
	..	G.O. No. 3137, Rev., dated 31st October 1913.	Alagapuri	0·0004	56	..	..
	..	G.O. No. 2103, Rev., dated 14th July 1913.	Addition VI to Kottamadakki reserved forest.	0·031	..	..	..
	..	G.O. No. 3947, Rev., dated 28th November 1913.	Addition to reserved forest II (b) in Vikramasingapuram.	0·003	..	..	..
	..	G.O. No. 2101, Rev., dated 14th July 1913.	Last bit of Nadugani.	0·002	..	..	..
Total ..	4,359			0·0649	56	..	..
							Western
South Canara.	798	G.O. No. 3336, dated 17th Nov. 1913.	Baindur extension No. I ..	·003	..	..	..
			Do. No. II ..	·008	..	..	..
		G.O. No. 1018, dated 3rd April 1914.	Aletti addition No. II ..	·02	..	..	..
			Do. No. III ..	·009	..	..	..
Total ..	798			·04	..	..	..
Malabar, North.	261	G.O. No. 1015, dated 3rd April 1914.	Ladysmith additions Nos. III and IV.	0·97	1,024	..	1,056
Total ..	261			0·97	1,024	..	..
Malabar, South.	108	..	....	..	..	..	..
The Nilgiris.	478 (b) — 3	G.O. No. 647 Rev., dated 2nd March 1914.	Keti valley block	·08 (f)—·01	..	..	..
Total ..	475			·07	..	..	..

(a) The difference is due to the deduction of areas disafforested.
(b) The difference is due to the deduction on account of recomputation of areas investigated by the Special Deputy Collector.
(c) The difference is due to the exclusion of the remaining area at settlement.

incurred on, Forest Settlements during 1913–14—*cont.*

Areas undergoing settlement.						Estimate of areas in which settlement operations have not yet commenced.
At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing settlement.		
Name of tract.	Area in square miles.	Name of tract.	Area in square miles.	In forest accounts.	In other accounts.	
9	10	11	12	13	14	15
Circle.						
				RS.	RS.	SQ. MLS.
Panamadangi reserve, Survey No. 18 of Vandrantangal village.	0·0020	....	..	152	..	..
Sholavaram reserve	0·0281	....	..	..	..	..
Karapattu extension	0·0844	....	..	..	..	..
....	..	Singarapet extension, Survey Nos. 129, and 130 of Sembarai village.	0·0344	..	..	..
		Andiappanur reserve, Survey Nos. 260 and 261 of Andiappanur village.	0·0062	..	..	..
....	..	....	..	..	..	..
Hudaidurgam	46	....	..	..	..	..
Arana	3	Jarugumalai	12·23	60	..	..
Tirthagiri	3	....	..	..	..	..
Vengur Padugais	1·00	Gundur extension	(*d*) 3·85	..	..	15·23
Palamalai extension	1·39	....	..	..	..	..
V. Kanapadi extension ..	1·00	....	..	..	..	..
Southern slopes	0·0137	Southern slopes	0·0062	..	..	..
Kokkuparai	0·0118	Adukkam	0·0007	..	..	..
Manalodai and Tirukuttachalla. Parvatam estates	0·114	....	..	..	..	..
....	..	....	..	..	..	..
....	...	....	..	..	..	..
....	..	....	..	..	..	..
....	..	....	..	..	..	..
....	..	....	..	..	..	..
	55·6440		16·1275	212	..	15·23
Circle.						
Alatti addition No. I ..	·006	Mudugalpare extension No. I ..	·02	..	..	..
....	..	Madibare extension No. I ..	·14	..	..	..
....	..	Do. No. II ..		..	..	..
....	..	Ballimane extension No. III ..	·32	..	..	..
....	..	Tombettu extension No. II ..	·02	..	..	..
....	..	Naravi extension No. VI ..	·04	..	..	..
	·006		·54	..	..	..
....	..	Mangalad estate (Peria addition).	0·13	(*e*) 113	..	..
		Chammattimalai estate (Hilldale addition).	0·32	350	..	..
	..		0·45	463	..	..
The Silent valley	35	....	..	..	..	..
....	.	....	..	..	..	..
	..		..	..	..	..

(*d*) About one square mile excluded when submitting section 4 notification.
(*e*) Expenditure incurred during 1912–13.
(*f*) Rectification due to adoption of surveyed area.

Statement showing the Progress made in, and the Expenditure

Name of forest district.	Area already settled at commencement of year.	Areas finally settled during the year.					
		Number and date of Government Order according final sanction to the settlement.	Name of forest settled.	Area in square miles.	Expenditure incurred during the year on areas finally settled.		Entire cost per square mile of areas finally settled during the year.
					In forest accounts.	In other accounts.	
1	2	3	4	5	6	7	8
							Western
	SQ. MLS.				RS.	RS.	RS.
Kollegal ..	447	G.O. No. 3635, Rev., dated 10th December 1913.	Madeswaranmalai	272	..	..	..
		G.O. No. 398, Rev., dated 7th February 1914.	Mombetta	11	..	..	..
Total ..	447			283	..	..	..
Coimbatore, North.	921	G.O. No. 178, Rev., dated 19th January 1914.	Palamalai addition	·266	6,984	..	6,026
		G.O. No. 273, Rev., dated 27th January 1914.	Talamalai addition	·353			
		G.O. No. 341, Rev., dated 2nd February 1914.	Gutialatur extension	·540			
Total.	921			1·159	6,984	..	..
Coimbatore, Central.	353	G.O. No. 3215, dated 6th November 1913.	Jagir Porathi	0·36	218	..	606
		G.O. No. 342, dated 2nd February 1914.	Sundapatti addition No. 1 ..	0·01	..	..	..
Total ..	353			·37	218	..	..
Coimbatore, South.	454	G.O. No. 3258, dated 10th November 1913.	Thalavoipatnam addition ..	·02	..	..	..
		G.O. No. 842, dated 17th March 1914.	Anamalai reserve addition No. I.	·01	..	..	..
Total ..	454			·03	..	..	..
Grand total.	3,817			285·6 or 285	8,226	..	..

incurred on, Forest Settlements during 1913-14—*cont.*

Areas undergoing settlement.						Estimate of areas in which settlement operations have not yet commenced.
At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing settlement.		
Name of tract.	Area in square miles.	Name of tract.	Area in square miles.	In forest accounts.	In other accounts.	
9	10	11	12	13	14	15
Circle—cont.						
				Rs.	Rs.	Sq. mls.
Addition to Doddasampagai extension first bit.	·009	Hanur addition A	·023	..	..	1
		Do. B	·001	..	..	..
		Do. C	·006	..	..	..
Chickailur addition No. I ..	·103	Cowdalli addition No. I ..	·023	..	..	..
Do. extension No. I ..	·091	Yedaralli addition No. 1 ..	·036	..	..	..
		Do. No. 2 ..	·253	..	..	..
		Do. No. 3 ..	·016	..	..	..
		Do. No. 4 ..	·003	..	..	..
		Do. No. 5 ..	·030	..	..	..
		Do. No. 6 ..	·160	..	..	..
		Chickailur extension No. 2 ..	·006	..	..	..
	·203		·557	..	..	1
South Bargur addition ..	·042	Enclosures in South Bargur reserve and its additions ..	·16	..	..	..
	·042		·16	..	..	..
Survey Nos. 397 and 402 of Sujjalatti village in Modur reserve.	·01	Survey Nos. 93-A and 93-B of Kummarampalaiyam (enclosures in Gopinari reserve).	·006	..	..	..
Anaikatti block north ..	1·76	Sundapatti additions Nos. 2 to 20.	·80	..	..	..
Do. south ..	7·36	Addition to Thadagam block IV.	·06	..	..	..
	9·13		·866	..	..	..
....	..	Additions to Anamalai reserve.	·08	410	..	..
....	..	Addition to Punachi reserve No. II.	·14	..	..	..
	..		·22	410	..	..
	44·38		2·79	873	..	1

ANNUAL FORM No. 67.

Forest Department, Madras Presidency.

RECORD of Demarcation and Maintenance of Boundaries during 1913-14.

District.	Length of boundaries artificially demarcated during the year.	Length of previously existing boundaries repaired.	Length of previously existing boundaries not repaired.	Total length of artificially marked boundaries at the close of the year.	Length of boundaries still to be demarcated at close of year.	Length of natural boundaries not requiring artificial marks.	Total length of boundaries at the close of the year.	Expenditure on demarcation during the year.	
								On new works.	On repairs.
1	2	3	4	5	6	7	8	9	10
Northern Circle.	MILES.	MILES.	MILES.	MILES.	MILES.	MILES.	MILES.	RS.	RS.
Ganjam	(*t*) 38	(*u*) and (*a*) 1,071	(*v*) 157	(*w*) 1,266	(*x*) 98	(*y*) 80	(*b*) and (*z*) 1,444	(*a*$_1$) 854	(*b*$_1$) 145
Vizagapatam	..	(*a*) 524 16	..	540	..	..	540	..	(*g*) 86
Gōdavari, Upper ..	..	(*a*) 425	..	425	..	143	568	(*e*) ..	..
Do. Lower ..	..	(*a*) 690 36	58	784	..	52	(*c*) 836	..	1,313 (*h*) —21
Kistna	..	(*a*) 461 70	74	605	..	41	(*c*) 646	(*f*) ..	773
Kurnool, East ..	..	(*a*) 577 108	18	703	..	48	751	..	3,684 (*h*) +1
Do. South ..	..	(*a*) 53 341	235	629	..	5	634	..	444
Do. West ..	..	(*a*) 345 254	331	930	..	100	(*d*) 1,030	..	40
Total ..	38	(*a*) 4,146 825	873	5,882	98	469	6,449	854	6,465
Central Circle.									
Bellary	..	(*a*) 75	1,713	1,788	4	..	1,792	..	(*i*) 786
Anantapur	..	71 19	1,735	1,825	..	..	1,825	..	(*j*) 779 (*k*) 1,076
Guntūr	..	88	1,304	1,392	..	.	1,392	..	(*l*) 1,575
Cuddapah, West ..	(*m*) 17	25 (*a*) 505	848	1,395	..	29	1,424	70	(*n*) 737 (*h*) — 238
Do. East ..	1	68 (*a*) 409	437	915	..	46	961	5	(*o*) 1,172 (*p*) + 82 (*h*) + 5
Nellore	..	(*a*) 2,079	..	2,079	..	84	2,163	..	(*q*) 726
Chingleput	..	(*a*) 904	..	304	..	..	904	..	(*r*) 303 (*h*) — 177
Chittoor	..	(*s*) 1,470	(*s*) 2	1,472	..	50	1,522	..	2,051 (*h*) + 118
Total ..	18	(*a*) 3,972 1,741	6,039	11,770	4	209	11,983	75	8,995

(*a*) Cleared by forest subordinates free of cost.

(*b*) The figure in col. 8 differs from that of last year as 5 miles of Kaliamba Rogada reserve line was newly sanctioned by the Conservator, which was demarcated during the year.

(*c*) The figures in column 8 differ from those of last year as certain blocks were disafforested during the year.

(*d*) Previous year's figures incorrect.

(*e*) Excludes Rs. 779 spent on Dhupati survey for payment of arrears of salaries and making alterations in the lines already surveyed and Rs. 63 spent in deviating 18 miles of Donald's line in the Nugur range.

(*f*) Excludes Rs. 340 being cost of coupe, etc., lines cut.

(*g*) Excludes Rs. 10 being cost of coupe lines cut.

(*h*) Added or deducted as per Accountant-General's audited figure.

(*i*) Includes cost of cutting coupe lines, demarcation, planting stone slabs, whitewashing, etc., relating to coupes and also clearing frontier boundary lines between Mysore and British forests.

(*j*) Of this Rs. 36 represents the cost of fixing stones slabs and the balance: the cost of new method of demarcation.

(*k*) For clearing boundary lines and erecting cairns.

(*l*) Cost of demarcation stones, etc.

(*m*) Length of coupe lines newly cut at a cost of Rs. 70.

(*n*) Includes Rs. 43 for grazing signboards and the balance for cutting woking circle lines.

(*o*) Maintenance of boundaries, etc.,

(*p*) Cost of demarcating felled coupes.

(*q*) Rectification of boundaries, etc.

(*r*) Cost of tar and chunam for marking standards, etc.

(*s*) Difference between columns 3 and 4 of this year's return and column 5 of last year's is due to 5 chains shown in column 2 of the last year's form having been taken on as miles incorrectly.

(*t*) Excludes 48 miles of boundaries belonging to Parlakimedi Maliahs.

(*u*) Do. 29 do. do.

(*v*) Do. 341 do. do.

(*w*) Do. 413 do. do.

(*x*) Do 15 do. do.

(*y*) Do. 8 do. do.

(*z*) Do. 436 miles belonging to the do.

(*a*$_1$) Do. Rs. 592 spent in the do.

(*b*$_1$) Do. 84 do. do.

Record of Demarcation and Maintenance of Boundaries during 1913–14—*cont.*

District.	Length of boundaries artificially demarcated during the year.	Length of previously existing boundaries repaired.	Length of previously existing boundaries not repaired.	Total length of artificially marked boundaries at the close of the year.	Length of boundaries still to be demarcated at the close of the year.	Length of natural boundaries not requiring artificial marks.	Total length of boundaries at the close of the year.	Expenditure on demarcation during the year.	
								On new work.	On repairs.
1	2	3	4	5	6	7	8	9	10
Southern Circle.	MILES.	MILES	MILES.	MILES.	MILES.	MILES.	MILES.	RS.	RS.
North Vellore ..	..	(*h*) 1,149	..	1,149	..	7	1,156	..	..
South do. ..	..	5; (*h*) 922	231	(*b*) 1,158	..	22	1,180	..	140; (*a*) — 1
South Arcot	..	(*h*) 1,027	138	(*c*) 1,165	..	..	1,165	..	157
North Salem	..	(*h*) 790	532	1,322	7	40	1,369	29 (*d*)	88
South do.	..	242; (*h*) 644	257	1,143	..	5	1,148	454	401; (*a*) + 2
Trichinopoly *cum* Tanjore.	..	(*h*) 559	448	1,007	11	24	1,042	..	..
Madura	94	(*h*) 967; 22	245	1,328	226	178	1,732	4,082	26
Tinnevelly *cum* Ramnad.	..	30	444	474	..	14	488	..	383 (*a*) — 33 + 392 (*e*)
Total ..	94	299; (*h*)6,058	2,295	8,746	244	290	9,280	4,565	1,565
Western Circle.									
South Canara ..	..	67	3,645	3,712	46	124	3,882	..	1,002
Malabar, North ..	10; (*f*)18	162	972	1,162	28	36	1,226	402	85
Do. South ..	..	62; (*h*) 3	41; (*g*) 25	131	(*i*) 5; 12; *h* 3	55	206	(*l*)178	..
The Nilgiris	..	6; (*h*) 117	1,491	1,614	(*j*)	299	1,913	..	123; (*k*) 290; (*m*) 28
Kollegal	30	11; (*h*) 12	54	107	(*h*) 298	87	492	747	380
Coimbatore, North ..	6; (*g*) 7	32; (*h*) 246	251	542	29	110	681	144	1,342
Do. Central.	..	(*h*) 306	268	574	22	44	640	..	22; (*k*) 7
Do. South ..	..	(*h*) 62; (*f*) 21	131	214	..	52	266	..	43
Total ..	71	361; (*h*) 746	6,878	8,056	142; (*h*)301	807	9,306	1,471	3,322
Grand total ..	221	(*h*)14,922; 3,226	16,085	34,454	789	1,775	37,018	6,965	20,347

(*a*) Added or substracted as per Accountant-General's figures.
(*b*) Difference is due to revised figures obtained by computation this year.
(*c*) Difference is due to disafforestation of certain areas in the district.
(*d*) Cost of demarcation of Galigattam proposed reserve.
(*e*) Expenditure on Tinnevelly-Travancore boundary line clearing.
(*f*) Frontier boundaries the cost of demarcating which was debited to "Political."
(*g*) Demarcated during last or previous years and omitted from the returns.
(*h*) Cleared by subordinates free of cost.
(*i*) Boundaries of forests preliminarily demarcated.
(*j*) Less than one mile.
(*k*) Cost of cutting and clearing block, compartment and coupe lines.
(*l*) Cost of preliminary demarcation.
(*m*) Expenditure on reconnaissance of the new district boundary.

Annual Form No. 68.

Forest Department, Madras Presidency, Central Circle.

Statement of Forest areas surveyed and under survey during the year 1913–14.

District.	Areas surveyed and under survey during the year 1913–14.																	
	Special surveys—Maps on 4-inch scale or over by Survey of India or Madras Survey.								Ordinary, included in district surveys.									
	With interior details.					Boundary surveys.			With interior details					Boundary surveys.				
	With details of growing stock.		Without details of growing stock.*						With details of growing stock.		Without details of growing stock.							
	Previous.	Of year.	Previous.	Of year.	Total cost.	Previous.	Of year.	Total cost.	Previous.	Of year.	Previous.	Of year.	Total.	Previous.	Of year.	Total cost.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		
Northern Circle.	S. M.	S. M.	S. M.	S. M.	RS.	S. M.	S. M.	RS.	S. M.	S. M.	S. M.	S. M.	RS.	S. M.	S. M.	RS.		
Direction	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Ganjam	..	..	584	..	..	447	..	(*a*)11,081	..	..	..	..	..	..	..	..		
Vizagapatam	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Gōdāvari, Upper ..	..	..	436	..	..	(*b*)174	..	..	..	..	..	..	..	..	..	..		
Do. Lower ..	..	..	70	..	..	(*b*) 70	..	..	..	..	..	..	..	..	..	..		
Kistna	..	..	(*c*) ..	..	..	(*c*) ..	..	..	..	..	..	..	..	..	..	..		
Kurnool, East ..	..	..	(*d*) 997	..	..	937	..	..	..	..	..	..	..	..	..	..		
Do. South ..	..	..	(*d*) 623	..	..													
Do. West ..	..	..	(*d*) 587	..	..													
Total ..	..	..	3,297	..	..	1,628	..	11,081	..	..	..	..	..	..	..	..		
Central Circle.																		
Bellary	..	..	..	..	..	..	..	..	..	..	690	..	..	..	..	..		
Anantapur	..	..	251	..	..	..	..	..	..	..	323	..	..	..	..	..		
Guntūr	..	..	65	..	..	..	..	..	..	..	..	..	..	..	..	..		
Cuddapah, West ..	..	..	587	..	..	..	..	..	..	..	..	..	..	..	..	..		
Do. East ..	..	..	1,048	..	..	..	..	..	..	..	..	..	..	..	..	..		
Nellore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Chingleput	..	..	46	..	..	..	..	..	..	..	..	..	..	..	..	..		
Chittoor	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Total ..	..	..	1,991	..	..	..	..	..	..	..	1,013	..	..	..	..	..		
Southern Circle.																		
North Vellore ..	..	..	(*e*) 489	..	..	..	..	..	..	..	..	..	..	..	..	..		
South do. ..	..	..	(*f*) 666	..	..	..	..	..	..	..	..	146	..	..	..	..		
South Arcot	..	..	68	..	2,767	145	..	..	..	..	(*g*) 263	7	..	..	..	..		
North Salem	..	..	792	..	24,366	..	..	..	..	..	..	..	..	..	..	..		
			(*h*)+ 46															
South do.	..	..	541	..	..	..	..	..	..	..	..	24	..	40	..	..		
Trichinopoly *cum* Tanjore.	..	..	66	..	25,000	124	..	246	..	..	..	..	..	280	..	..		
Madura	..	..	613	..	..	..	..	..	..	..	..	..	..	..	..	..		
Tinnevelly *cum* Ramnad.	..	..	429	..	3,451	..	..	..	..	..	..	..	..	..	..	..		
Total ..	..	..	3,664 + 46 = 3,710	..	55,584	269	..	246	..	..	263	177	..	320	..	..		

* Five square miles excluded on account of recomputation of areas investigated by the special Deputy Collector.

(*a*) Relates to Ganjam, Gōdāvari (Upper and Lower), Guntūr and Kurnool (East, South and West divisions).
(*b*) Previous year's figure rectified.
(*c*) Previous year's figures are omitted as they are of Guntūr (old Kistna) district.
(*d*) Rectification as per India Survey figures.
(*e*) Difference is due to disafforestation of 10 square miles.
(*f*) Do. of 30 square miles and transfer of 49 square miles to column 26.
(*g*) Do. of 8 square miles and revised figures furnished by the Collector.
(*h*) Represents area of Hudaidurgam reserved land already surveyed.

Statement of Forest areas surveyed and under survey during the year 1913–14—*cont.*

District.	Areas surveyed and under survey during the year 1913–14—*cont.*								Areas remaining to be taken under survey	Total forest area at end of year, as per Form No. 65.	Cost.		
	Chain and compass or other surveys by local officers.												
	With interial details.					Boundary surveys.							
	4-inch or over.		Under 4-inch.										
	Previous	Of year	Previous.	Of year.	Total cost.	Previous.	Of year.	Total cost.			Previous.	Of year.	Entire cost of all surveys to end of the year.
	18	19	20	21	22	23	24	25	26	27	28	29	30
Northern Circle.	S. M.	S. M.	S. M.	S. M.	RS.	S. M.	S. M.	RS.	S. M.	S. M.	RS	RS.	RS.
Direction	..	..	..	..	..	..	..	..	..	..	2,291	166	2,457
Ganjām	(*a*) 59	..	..	..	..	1,730	..	(*c*) 118	..	639	22,454	(*b*) 1,198	23,652
Vizagapatam	302	..	..	..	..	..	9	..	2	313	2,300	..	2,300
Gōdāvari, Upper	(*a*)346	..	(*d*)0·019	..	31	184 villages.	..	18,481	..	782	(*e*)28,948	2,718	31,666
Do. Lower	1	..	26	..	6	540	..	796	376	479	13,096	(*b*) 761	13,857
Kistna	16	..	..	..	5	374	..	203	261	277	7,298	(*b*) 972	8,270
Kurnool, East	51	..	..	..	215	(*f*) 92	..	..	..	1,000	68,869	1,069	69,938
Do. South						143	..	..	143	766	53,268	2,673	55,941
Do. West						(*a*) $5\frac{1}{3}$	9	338	280	867	46,383	(*b*) 1,030	47,413
Total	775	..	26·019	..	257	2,884$\frac{1}{3}$ and 184 villages.	18	19,936	1,062	5,123	2,44,907	10,587	2,55,494
Central Circle.													
Bellary	34	·41	..	..	133	..	·41	132	..	690	8,456	1,117	9,573
Anantapur	179	..	..	..	..	67	..	1,775	..	753	6,849	937	7,816
Guntūr	76	..	..	..	..	..	..	..	(*n*) 527	814	17,753	(*h*) 414	18,167
Cuddapah, West	(*g*) 34	..	..	..	..	..	..	..	(*i*) 147	734	(*f*)40,614	544	41,158
Do. East	..	..	..	..	..	..	..	..	35	1,083	(*j*)72,522	737	73,259
Nellore	..	..	..	..	..	..	..	..	(*l*) 260	738	6,902	(*k*) 1,415	8,317
Chingleput	..	..	..	..	..	..	..	..	..	209	4,262	(*m*) 301	4,563
Chittoor	..	..	..	..	..	..	..	..	..	840	988	(*m*) 480	1,468
Total	323	·41	..	..	133	67	·41	1,907	969	5,861	1,58,346 (*o*)+3,565	5,975 (*o*)+ 845	1,64,321 (*o*)+4,410
Southern Circle (*r*).													
North Vellore	..	..	..	..	..	..	..	..	..	489	8,079	118	8,197
South do.	..	..	..	..	..	..	..	..	49	715	13,052	590	13,642
South Arcot	6	..	..	..	52	..	..	..	..	337	7,251	364 (*s*) + 1	7,616
North Salem	..	..	..	..	..	..	..	..	..	838	32,888	1,285	34,173
South do.	38	..	..	..	317	398	..	149	(*p*) 18	599	29,552	1,267	30,819
Trichinopoly *cum* Tanjore.	28	..	..	..	1,264	149	..	524	109	362	36,158	615	36,773
Madura	..	..	..	..	..	48	..	..	..	661	7,822	1,598	9,420
Tinnevelly *cum* Rāmnād.	..	..	..	..	..	..	..	..	..	429	3,989	664	4,653
Total	72	..	..	..	1,633	595	..	673	176	4,430	1,38,791 (*q*) + 783	6,502 (*q*) + 600	1,45,293 + 1,383 or 1,46,676

(*a*) Previous year's figure rectified.
(*b*) Includes pay of establishment.
(*c*) An amount of Rs. 46 for the work done in previous year now charged during 1913–14.
(*d*) Previous year's figure is now shown in square miles.
(*e*) Includes Rs. 18,481 omitted in previous years.
(*f*) Correspondence pending as to the correctness of the figure.
(*g*) Length in linear miles of spring channels surveyed.
(*h*) Pay of a Draftsman and cost of survey of roads and coupes.
(*i*) Area of isolated reserves.
(*j*) Distributed by the Collector by calculating the total cost proportionately between the two divisions.
(*k*) Pay of a surveyor and his lascar employed in verification of boundaries.
(*l*) Area of Veligondas and other hill blocks to be surveyed by the Survey of India.
(*m*) Pay of a draftsman.
(*n*) Revised figure reported by the Collector.
(*o*) Expenditure under "Direction."
(*p*) Increase due to area added during the year.
(*q*) Expenditure under Direction.
(*r*) Figures in column 29 represent pay of Surveyors and Draftsmen.
(*s*) Added as per Accountant-General's figure.

Statement of Forest areas surveyed and under survey during the year 1913–14—*cont.*

District.	Areas surveyed and under survey during the year 1913–14.															
	Special surveys—Maps on 2-inch scale or over, by Survey of India or Madras Survey.								Ordinary, included in district surveys.							
	With interior details.					Boundary surveys.			With interior details.					Boundary surveys.		
	With details of growing stock.		Without details of growing stock.		Total cost.				With details of growing stock.		Without details of growing stock.		Total cost.			
	Previous.	Of year.	Previous.	Of year.		Previous.	Of year.	Total cost.	Previous.	Of year.	Previous.	Of year.		Previous.	Of year.	Total cost.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Reserved forests and reserved lands.																
Western Circle.	S. M.		S. M.	S. M.		S. M.		Rs.			S. M.		Rs.			
South Canara ..	..	..	719	..	..	592 and 25 linear miles.	..	7,390	..	..	77	..	†6,594	..	..	..
Malabar, North ..	..	..	155	..	..	158 and 3 linear miles.	..	7,390	..	..	..	..	..	..	..	..
Do. South ..	1	..	108	..	..	130	..	..	..	..	2	..	..	..	..	..
The Nilgiris	..	..	(a) 55	..	..	..	..	..	..	..	..	..	..	..	..	..
Kollegal	..	..	502	..	..	..	..	..	..	..	..	..	..	..	..	..
Coimbatore, North ..	..	..	730	..	..	319	..	7,574	..	..	..	..	..	..	..	..
Do. Central..	..	..	§ (a) 1	..	..				..	..	* 26					
Do. South ..	..	..	895	..	..				..	..	* 16					
			§ + 1													
			337			7	..	..	..	..	* 7	..	..	..	..	..
			§(a) 1													
			‡ 447													
Total ..	1	..	3,894	..	..	1,206 and 28 linear miles.	..	22,354	..	..	128	..	6,594	..	..	..
			(a) 57													
Grand total, Presidency.	1	..	12,949	..	55,584	3,103 28 linear miles.	..	33,681	..	..	1,404	177	6,594	320	..	..

* Area for which final maps have been prepared by the Madras Survey.
† Includes the cost of survey of 73 square miles in Coorg forests.
‡ One hundred and thirty square miles resurveyed on 2-inch scale during 1909–10 and 9 square miles during 1911–12.
§ Area of enclosures already surveyed.

(*a*) Reserved lands.

Statement of Forest areas surveyed and under survey during the year 1913-14—*cont.*

District.	Areas surveyed and under survey during the year 1913-14—*cont.*								Areas remaining to be taken under survey.	Total forest area at end of year, as per form No. 66.	Cost.		
	Chain and compass or other surveys by local officers.												
	With interior details.					Boundary surveys.							
	4-inch or over.		Under 4-inch.		Total cost.								
	Previous.	Of year.	Previous	Of year.		Previous.	Of year.	Total cost.			Previous.	Of year.	Entire cost of all surveys to end of the year.
	18	19	20	21	22	23	24	25	26	27	28	29	30
	Reserved forests and reserved lands—cont.												
Western Circle.	S. M.	S. M.				S. M.	S. M.	RS.	S. M.	S. M.	RS.	RS.	RS.
South Canara ..	..	..	..	..	..	908	2	..	..	798 (*a*) 1	59,121	405	59,526
Malabar, North ..	..	..	..	..	..	6	3	..	107	262	14,995	380	15,375
Do. South ..	..	..	..	..	..	183	..	..	..	108 (*a*) 55	3,260	622	3,882
The Nilgiris ..	..	..	..	..	..	..	..	..	(*b*) 58 (*e*)—3 (*f*)—5	475 (*a*) 82	4,345	483	4,828
Kollegal	..	..	..	..	..	68 linear miles.	..	..	..	730 (*a*) 1	1,00,685	1,251	1,02,464
Coimbatore, North ..	..	..	..	..	..	2	2	..	..	922		518	
Do. Central ..	..	..	..	..	..	4	4	99	9	353 (*a*) 10	15,458	634	17,394
Do. South ..	11	15	..	..	..	2	..	..	..	454		1,272	
Total ..	11	15	..	..	..	1,105 and 68 linear miles.	11	99	166	4,102 (*a*) 149	1,97,864 (*c*) + 69 (*d*) + 12,476	5,595	2,03,459 (*c*) + 69 (*d*) + 12,476
Grand total ..	1,181	56	26	..	2023	4,651 184 villages and 68 linear miles.	2941	22,615	2,373	19,665	7,56,801	30,104	7,86,905

(*a*) Reserved lands.
(*b*) Reserves of less than one square mile in extent.
(*c*) Charges included under Direction in 1906-07.
(*d*) Survey of India charges in 1906-07.
(*e*) Rectification due to adoption of surveyed area.
(*f*) Toda patta lands.

Annual Form No. 69.

Forest Department, Madras Presidency.

Progress made in working-plans during 1913–14.

District.	Areas for which working-plans have been completed and approved by the Board.		Areas for which working-plans are being compiled or have been compiled but not sanctioned.		Areas for which working-plans have still to be taken in hand.	Areas for which working-plans are not at present required.	Total forest areas as in Form No. 65.	Entire cost per square mile of working-plans completed.	Remarks.
	At commencement of the year.	During the year.	At commencement of the year.	Taken in hand during the year.					
1	2	3	4	5	6	7	8	9	10
Northern Circle.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	RS.	
Ganjām	442	..	..	..	197	..	639	..	
Vizagapatam ..	145	..	28	..	73	67	313	..	
Gōdāvari, Upper ..	117	..	..	62	603	..	782	..	
Do. Lower ..	(*a*) 24	..	55	325	..	75	479	..	
Kistna	150	..	64	..	..	63	277	..	
Kurnool, East ..	..	..	..	1,000	..	..	1,000	..	
Do. South ..	(*b*) 114	572	..	80	..	..	766	..	
Do. West ..	469	..	..	..	..	398	867	..	
Total ..	1,461	572	147	1,467	873	603	5,123	..	
Central Circle.									
Bellary	(*c*) ..	..	105	..	(*f*) 585	..	690	..	
Anantapur ..	426	..	..	..	327	..	753	..	
Guntūr	41	..	164		609	..	814	..	
Cuddapah, West ..	158	..	272	2	175	127	734	..	
Do. East ..	(*d*) 109	..	28	..	(*f*) 946	..	1,083	..	
Nellore	(*e*) 58	..	..	144	536	..	738	..	
Chingleput ..	209	..	..	..	..	..	209	..	
Chittoor	791	..	..	..	49	..	840	..	
Total ..	1,792	..	569	146	3,227	127	5,861	..	
Southern Circle.									
Vellore, North ..	(*g*) 487	..	..	..	..	(*h*) 2	489	..	
Do. South ..	(*i*) 591	..	60	12	52	..	715	..	
Arcot, South ..	155	..	150	..	31	(*j*) 1	337	..	
Salem, North ..	161	..	677	..	..	..	838	..	
Do. South ..	452	..	..	127	(*k*) 18	* 2	599	..	
Trichinopoly *cum* Tanjore.	(*l*) 205	..	39	..	(*m*) 116	3	362	..	
Madura	356	..	..	..	(*n*) 305	..	661	..	
Tinnevelly *cum* Rāmnād.	246	..	..	..	..	183	429	..	
Total ..	2,653	..	926	139	522	191	4,430	..	

(*a*) 362·14 acres of Bendamurlanka casuarina plantation having been disafforested the working-plan became extinct.
(*b*) Rectification of area due to adoption of Survey of India figures.
(*c*) Working-plans for 259 square miles have been cancelled in Board's Proceedings, Forest No. 359, Mis., dated 16th June 1914.
(*d*) Do. for 228 do. do. No. 398, Mis., dated 30th June 1914.
(*e*) Due to the revision of Kavali working-plan of 63 square miles.
(*f*) Includes area of sanctioned working-plans cancelled by the Board.
(*g*) Difference is due to disafforestation of 10 square miles.
(*h*) Transferred from column 6 of the last year's return as the area is to be disafforested.
(*i*) Difference is due to disafforestation of 30 square miles and transfer of 12 square miles to column 5.
(*j*) Do. do. of 8 square miles.
(*k*) Increase is due to addition of 12 square miles of reserved land during the year.
(*l*) Excludes one square mile disafforested during the year.
(*m*) Four square miles were added under reserved lands.
(*n*) Five square miles were excluded on account of revision of boundaries of reserves investigated by the Special Deputy Collector.

* Transferred from column 2. Last year's figures in columns 2 and 5 should have been 454 and 133, respectively.

Progress made in working-plans during 1913-14—*cont.*

District.	Areas for which working-plans have been completed and approved by the Board.		Areas for which working-plans are being compiled or have been compiled but not sanctioned.		Areas for which working-plans have still to be taken in hand.	Areas for which working-plans are not at present required.	Tota forest area, as in form No. 65.	Entire cost per square mile of working-plans completed.
	At commencement of the year.	During the year.	At commencement of the year.	Taken in hand during the year.				
1	2	3	4	5	6	7	8	9
				Reserved forests.				
Western Circle.	SQ. MLS.		SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	
South Canara	589	..	2	..	207	..	798	..
Malabar, North	178	..	7	46	31	..	262	..
Do. South	7	..	..	..	95	2	104	..
The Nilgiris	103	..	6	..	366	..	475	..
Kollegal	43 †+10	..	22	..	160	495	730	..
Coimbatore, North ..	289	..	..	..	633	..	922	..
Do. Central ..	220	..	..	..	54	79	353	..
Do. South ..	75	..	..	..	35	317	427	..
Total ..	1,514	..	37	46	1,581	893	4,071	..
				Reserved lands.				
South Canara	..	..	..	..	1	..	1	..
Malabar, North	..	..	..	..	*	..	*	..
Do. South	..	..	..	..	..	35	35	..
The Nilgiris	..	..	..	..	1	5	6	..
Kollegal	10 †—10	..	..	..	..	1	1	..
Coimbatore, North ..	..	..	..	..	..	*	*	..
Do. Central ..	..	..	..	..	10	..	10	..
Do. South ..	..	..	..	..	*	*	*	..
Total ..	..	..	..	..	12	41	53	..
				Leased forests.				
Malabar, South	24	..	..	..	..	..	24	..
The Nilgiris	76	..	..	..	..	..	76	..
Coimbatore, South ..	..	..	..	..	27	..	27	..
Total ..	100	..	..	..	27	..	127	..
Total, Western Circle ..	..	..	..	..	..	..	..	..
Grand total ..	1,614	..	37	46	1,620	934	4,251	..
Grand total, Presidency.	7,519	572	1,679	1,798	6,242	1,855	19,665	

* Less than one square mile. † Transferred to reserved forests.

ANNUAL

Forest Department,

COMMUNICATIONS

District.	New work undertaken during the year.					
	Buildings.		Roads and paths.			Total expenditure on new work.
	Description of building.	Expenditure incurred.	Road or path and object of the same.	Length of road or path.	Expenditure incurred.	
1	2	3	4	5	6	7
						Northern
		Rs.		Mls.	Rs.	Rs.
Ganjām ..	Rest-houses	1,432	Cart-roads	8	4,452	8,698
	(*a*) Houses for subordinate establishment	2,255	Bridges	..	359	..
	Others	161	Aligning bridle-paths	10	39	..
				18	4,850	8,698
			Add A-VII(*a*)	..	..	396
	Total, Ganjām ..	3,848		18	4,850	9,094
Vizagapatam.	Rest-houses	181	Inspection paths	6⅛	165	864
	Houses for subordinate establishment	314				
	Others	204				
	Total, Vizagapatam ..	699		6⅛	165	864
Gōdāvari, Upper.	Rest-houses	140	Cart-roads	6¾	640	4,620
	Houses for subordinate establishment	633				
	Others	3,207	Add A-VII (*a*)	..	..	1,246
	Total, Gōdāvari, Upper ..	3,980		6¾	640	5,866
Gōdāvari. Lower,	Rest-houses	2,490	Cart-roads	½	62	4,558
	Houses for subordinate establishment	928	Alignment of cart-roads ..	7½	42	..
	Others	1,036		10	104	4,558
			Add A-VII (*a*)	..	..	878
	Total, Gōdāvari, Lower ..	4,454		10	104	5,436
Kistna ..	Houses for subordinate establishment	38	Cart-roads	7⅜	3,583	3,639
	Others	18				
	Total, Kistna ..	56		7⅜	3,583	3,639

(*a*) Excludes Rs. 15 incurred in erecting a forester's shed in the Parlākimedi Maliahs.

FORM No. 70.

Madras Presidency.

and Buildings.

Repairs executed during the year.					
Buildings.		Roads and paths.			Total expended on repairs.
Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired.	Expenditure incurred.	
8	9	10	11	12	13
Circle.					
	RS.		MLS.	RS.	RS.
Rest-houses	1,429				
(*b*) Houses for subordinate establishment	286	Ghat-roads	2	19	5,175
Others	393	Cart-roads	21	553	..
	2,108	Bridle-paths	4	5	..
Add pay of establishment	1,981		27	577	5,175
		Add pay of establishment	..	509	..
			27	1,086	5,175
		Add A-VII (*c*)	..	..	11
	4,089		27	1,086	5,186
Rest-houses	255				
Houses for subordinate establishment	194	Cart-roads	23	327	1,832
Others	119	Foot-paths	13	150	..
	568		36	477	1,832
Add pay of establishment	760	Deduct as per Accountant-General's audited figures	..	—1	..
Add as per Accountant-General's audited figures	+ 28		36	476	1,832
	1,356	Add A-VII (*c*)	..	..	187
			36¼	476	2,019
Rest-houses	214				
Houses for subordinate establishment	438	Cart-roads	130½	347	2,728
Others	155				
	807				
Add pay of establishment	1,574				
	2,381		130½	347	2,728
Rest-houses	678	Cart-roads	64½	1,327	3,876
Houses for subordinate establishment	318	Add A-VII (*c*)	..	..	412
Others	852	Deduct as per Accountant-General's audited figures	..	..	—1
	1,848				
Add pay of establishment	710				
	2,558				
Add as per Accountant-General's audited figures	+ 1				
	2,559				
Deduct amount expunged	— 10				
	2,549		64½	1,327	4,287
Rest-houses	167	Cart-roads	12½	260	902
Houses for subordinate establishment	178	Bridle-paths	1⅛	49	..
Others	18		13⅝	309	902
	363	Add A-VII (*c*)	..	..	1,798
Add pay of establishment	230				
	593		13⅝	309	2,700

(*b*) Excludes Rs. 33 spent on repairs in the Parlakimedi Maliahs.

Communications

District.	New work undertaken during the year.					
	Buildings.		Roads and paths.			Total expenditure on new works.
	Description of building.	Expenditure incurred.	Road or path and object of the same.	Length of road or path.	Expenditure incurred.	
1	2	3	4	5	6	7
						Northern
		RS.		MLS.	RS.	RS.
Kurnool, East.	Houses for subordinate establishment	9,671	Ghat-road	16	8,392	21,743
	Others	892	Bridle-paths	32	2,667	..
			Inspection path	11	114	..
			Alignment of bridle path ..	2	7	..
	Total, Kurnool, East ..	10,563		60	11,180	21,743
Kurnool, South.	Houses for subordinate establishment	4,608	Cart-roads	29¾	2,535	7,798
	Others	257	Bridle-path	5	398	..
	Total, Kurnool, South ..	4,865		34¾	2,933	7,798
Kurnool, West.	Rest-houses	14	Cart-roads	7¼	1,247	1,311
	Houses for subordinate establishment	34				
	Others	16				
	Total, Kurnool, West ..	64		7¼	1,247	1,311
Total, Northern Circle.	Rest-houses	4,257	Ghat-roads	15	8,392	53,231
	Houses for subordinate establishment	18,481	Cart-roads	61⅝	12,519	..
			Bridle-paths	37	3,065	..
	Others	5,791	Inspection paths	17⅛	279	..
			Alignment of bridle-paths and cart-roads	19⅓	88	..
			Bridges	..	359	..
				150¼	24,702	53,231
			Add A-VII (*o*)	..	..	2,520
	Total, Northern Circle ..	28,529		150¼	24,702	55,751
						Central
Bellary ..	Head-quarter houses .. .	992	Cart-road	*	55	..
	Rest-houses	1,746	Others	26-2-3½	381	..
	Houses for subordinates ..	5,148	....	..	..	.
	Others	3	....	.	..	.
	Total ..	7,889	Total ..	26-2-3½	436	8,325
	..		A-VII (*o*)	..	..	..
			Sinking wells, Rs. 637	..	..	911
			Digging trial wells, Rs. 87 ..	..	..	
			Constructing platforms, Rs. 23.	..	..	
			Constructing compound wall, Rs. 164.	..	..	
	Total, Bellary ..	7,889	Total ..	26-2-3½	436	9,236

* The length of the road is 3 miles as already reported in last year's return. The amount paid is only in final settlement of the account of the work.

and Buildings—*cont.*

Repairs executed during the year.					
Buildings.		Roads and paths.			Total expended on repairs.
Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired.	Expenditure incurred.	
8	9	10	11	12	13
Circle—cont.					
	Rs.		Mls.	Rs.	Rs.
Rest-houses	127	Ghat-road (Revetment repaired) ..	..	9	2,517
Houses for subordinate establishment	88	Cart-roads	M. ch. 68 11 or 68⅞ M	986	..
Others	452	Bridle-path	4¼	4	..
	667		72⅜	999	2,517
Add pay of establishment	852	Deduct as per Accountant-General's audited figures.	..	— 2	.
Add as per Accountant-General's audited figures	+ 1		72⅜	997	2,517
		Add A-VII (*c*)	..	..	382
		Add as per Accountant-General's audited figures.	..	..	+ 255
	1,520		72⅜	997	3,154
Rest-houses	175	Cart-roads	38	1,799	3,885
Houses for subordinate establishment	181	Add pay of establishment	.	401	..
Others	552	Add as per Accountant-General's audited figures	..	+ 20	..
	908		38	2,220	3,885
Add pay of establishment	757	Add A-VII (*c*)	..	..	2,584
	1,665		38	2,220	6,469
Rest-houses	57	Cart-roads	12	124	1,231
Houses for subordinate establishment	210	A-VII (*c*)	..	..	721
Others	312				
	579				
Add pay of establishment	528				
	1,107		12	124	1,952
Rest-houses	3,102	Ghat-roads	1 7/16	28	22,146
Houses for subordinate establishment	1,893	Cart roads	369 3/16	5,723	..
Others	2,853	Bridle-paths	9 3/16	58	..
		Foot-paths	13 5/16	150	..
	7,848		394¼	5,959	22,146
Add pay of establishment	7,392	Add pay of establishment	..	910	..
	15,240	Add as per Accountant-General's audited figures	..	+ 17	..
Add as per Accountant-General's audited figures	+ 30		394¼	6,886	22,146
	15,270	Add A-VII (*c*)	..	..	6,095
Deduct amount expunged	— 10	Add as per Accountant-General's audited figures	..	..	+ 254
	15,260		394¼	6,886	28,495
Circle.					
Head-quarter houses	146	Cart-roads	2-4-0	123	..
Rest-houses	170	....	..	..	..
Houses for subordinates	218	....	..	..	..
Add as per Accountant-General's audited figures, including cost of establishment.	969	....	..	..	..
Total ..	1,503	Total ..	2-4-0	123	1,626
....	..	A-VII (*c*)	..	..	..
....	..	Repairing wells, Rs. 57	.	..	78
....	..	Removing silt, Rs. 10	..	..	
....	..	Others, Rs. 11	..	..	
Total ..	1,503	Total ..	2-4-0	123	1,704

Communications.

District.	New work undertaken during the year.					
	Buildings.		Roads and paths.			Total expenditure on new work.
	Description of building.	Expenditure incurred.	Road or path and object of the same.	Length of road or path.	Expenditure incurred.	
1	2	3	4	5	6	7
						Central
		Rs.		Mls.	Rs.	Rs.
Anantapur ..	Head-quarter houses	1,042	Cart-roads	5-1-3 3/22	755	..
	Rest-houses	1,797	....	..		..
	Others	48	....	..	..	..
	Total ..	2,887	Total ..	5-1-3 3/22	755	3,642
			A-VII (*o*)	..	..	..
			Sinking well, Rs. 1,402 ..	..	..	1,589
			Digging trial wells, Rs. 48 .	..	..	
			Constructing compound wall Rs. 96.	..	..	
			Others, Rs. 43	..	..	
			Deduct as per Accountant-General's audited figures.	..	..	— 9
	Total, Anantapur ..	2,887	Total ..	5-1-3 3/22	755	5,222
Guntūr ..	Rest-houses	215	....	..	..	..
	Houses for subordinates ..	385	....	..	..	..
	Total ..	600	Total .	..	..	600
			A-VII (*o*)	..	..	..
			Sinking wells, Rs. 57	..	..	258
			Improving channels, Rs. 201 ..	..	..	
	Total, Guntūr ..	600	Total ..	..	..	858
Cuddapah, West.	Rest-houses	652	Cart-road	3-6-0	42	..
	Houses for subordinates ..	74	....	..	..	..
	Others	324	...	..	..	..
	Total ..	1,050	Total ..	3-6-0	42	1,092
			A-VII (*o*)	..	..	..
			Constructing compound walls, Rs. 39.	..	..	41
			Others, Rs. 2		..	
	Total, Cuddapah West ..	1,050	Total ..	3-6-0	42	1,133
Cuddapah, East.	Head-quarter houses	1,925	Cart-roads	21-0-0	1,690	..
	Rest-houses	825	Bridle-paths	28-3-6	3,042	..
	Houses for subordinates ..	859	Others	..	3	..
	Others	1,464	....	..	..	..
	Total ..	5,073	Total ..	49-3-6	4,735	9,808
			A-VII (*o*)	..	..	..
			Sinking wells	..	..	148
	Total, Cuddapah East ..	5,073	Total ..	49-3-6	4,735	9,956

and Buildings—*cont.*

Repairs executed during the year.					
Buildings.		Roads and paths.			Total expended on repairs.
Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired.	Expenditure incurred.	
8	9	10	11	12	13
Circle—cont.					
	Rs.		MLS.	Rs.	Rs.
Rest-houses	2,107	Cart-roads	4-0-0	1,063	..
Others	135	Bridle-paths	3-0-0	30	..
		Others	1-4-5$\frac{1}{11}$	19	..
Add as per Accountant-General's audited figures, including cost of establishment.	663	*Add* as per Accountant-General's audited figures.	..	324	..
	2,905	Total ..	8-4-5$\frac{1}{11}$	1,436	4,341
....	..	....	..	..	..
....	..	....	..	..	..
....	..	....	..	..	..
....	..	....		..	..
....	..	....	..	..	..
....	..	....	..	..	..
Total ..	2,905	Total ..	8-4-5$\frac{1}{11}$	1,436	4,341
Head-quarter houses	8	Cart-road	0-6-8$\frac{3}{4}$	7	..
Rest-houses	30	....	..	..	..
Houses for subordinates	12	....	..	..	..
Others	81	....	..	..	..
Cost of establishment	1,039	....	..	..	..
Deduct as per Accountant-General's audited figures.	— 3	....	..	..	..
Total ..	1,167	Total ..	0-6-8$\frac{3}{4}$	7	1,174
....	..	A-VII (*e*)	..	..	..
....	..	Removing silt, Rs. 14	..	..	48
....	..	Deepening wells, Rs. 49	..	..	
....	..	*Deduct* as per Accountant-General's audited figures.	..	..	
Total ..	1,167	Total ..	0-6-8$\frac{3}{4}$	7	1,222
Head-quarter houses	97	Cart-roads	6-3-0	167	..
Rest-houses	241	*Deduct* as per Accountant-General's audited figures.	..	—1	..
Houses for subordinates	20	.. ..	..	..	..
Others	86	....	..	..	..
Cost of establishment	502	....	..	..	..
Add as per Accountant-General's audited figures.	+ 12	....	..	..	..
Total ..	958	Total ..	6-3-0	166	1,124
		A-VII (*e*)	..	..	..
....	..	Repairing walls, Rs. 15	..	..	16
....	..	Constructing compound wall, Rs. 4 ..	..	..	
....	..	Others, Rs. 14	..	..	
....	..	*Deduct* as per Accountant-General's audited figures 17.	..	..	
Total ..	958	Total ..	6-3-0	166	1,140
Head-quarter houses	29	Cart-roads	35-3-8$\frac{5}{11}$	671	..
Rest-houses	741	Bridle-paths	11-4-8$\frac{1}{2}$	292	..
Houses for subordinates	44	....	..	..	..
Others	74	....	..	..	..
Cost of establishment	377	.. ..	..	..	..
Total ..	1,265	Total ..	46-8-7$\frac{5}{22}$	963	2,228
....	..	A-VII (*e*)	..	..	..
....	..	Repairing wells, Rs. 129	..	..	135
....	..	Removing silt, Rs. 6	..	..	
Total ..	1,265	Total ..	46-8-7$\frac{5}{22}$	963	2,363

Communications

District.	New work undertaken during the year.					
	Buildings.		Roads and paths.			Total expenditure on new work.
	Description of buildings.	Expenditure incurred	Road or path and object of the same.	Length of road or path.	Expenditure incurred.	
1	2	3	4	5	6	7
						Central
		Rs.		Mls.	Rs.	Rs.
Nellore ..	Head-quarter houses	1,553	....	..	..	..
	Rest-houses	1	....	..	..	..
	Houses for subordinates ..	488	....	..	..	..
	Others	207	....	..	..	..
	Total ..	2,249	Total ..	..	..	2,249
			A-VII (*a*)	..	..	..
			Fencing .. 37 ..	..	..	62
			Add as per Accountant-General's audited figures. 25	..	..	
	Total, Nellore ..	2,249	Total ..	..	..	2,311
Chingleput ..	*Nil.*					
	Total, Chingleput ..	..	Total ..	..	..	..
Chittoor ..	Rest-houses	1,509	Cart-roads	3-5-5	1,133	..
	Houses for subordinates ..	907	....	..	..	..
	Others	215	....	..	..	..
	Total ..	2,631	Total ..	..	1,133	3,764
			A-VII (*a*)	..	..	..
			Sinking wells .. 527 ..	..	..	527
	Total, Chittoor ..	2,631	Total ..	3-5-5	1,133	4,291
Total, Central Circle.	Head-quarte houses	5,512	Cart-roads	32-12-8$\frac{3}{12}$	3,675	..
	Rest-houses	6,745	Bridle-paths	28-3-6	3,042	..
	Houses for subordinates ..	7,860	Others	26-2-5$\frac{1}{2}$	384	..
	Others	2,262	....	..	..	..
	Total ..	22,379	Total ..	88-2-7$\frac{7}{11}$	7,101	29,480
			A-VII (*a*)	..	..	..
			Sinking wells	..	2,771	
			Digging trial wells	..	135	
			Constructing compound walls.	..	299	
			Do. platforms ..	..	23	
			Improving channels	..	201	3,527
			Fencing	..	37	
			Others	..	45	
			Variations as per Accountant-General's audited figures.	..	16	
	Total, Central Circle ..	22,379	Total ..	88-2-7$\frac{7}{11}$	10,628	33,007

and Buildings—*cont.*

Repairs executed during the year.					
Buildings.		Roads and paths.			Total expended on repairs.
Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired.	Expenditure incurred.	
8	9	10	11	12	13
Circle—cont.					
	Rs.		MLS.	Rs.	Rs.
Head-quarter houses	64	Cart-road	..	163	..
Rest-houses	370	Others	..	20	..
Houses for subordinates	56	....	..	..	..
Others	121	....	..	..	..
Add as per Accountant-General's audited figures, including cost of establishment.	1,242	....	..	..	..
Total ..	1,853	Total ..		183	2,036
Total ..	1,853	Total ..	..	183	2,036
Head-quarter houses	30	Cart-roads	10-2-0	420	..
Rest-houses	475	Bridle-paths	4-0-0	10	..
Houses for subordinates	82	....	..	..	..
Others	92	....	..	..	..
Total ..	679	Total ..	..	430	1,109
....	..	A-VII (*c*)	..	..	..
....	..	Repairing wells, Rs. 55	..	..	71
....	..	Removing silt Rs. 3	..	..	
....	..	Others, Rs. 13	..	..	
Total ..	679	Total ..	14-2-0	430	1,180
Head quarter houses	204	Cart-roads	28-0-0	1,010	..
Rest-houses	2,666	Bridle-paths	4-4-0	306	..
Others	177	Others	10-6-0	39	..
Cost of establishment	1,365	....	..	..	..
Add as per Accountant-General's audited figures.	+ 1	....	..	..	..
Total ..	4,413	Total ..	43-2-0	1,355	5,768
....	..	A-VII (*c*)	..	..	..
....	..	Deepening wells Rs. 71	..	..	72
....	..	Removing silt Re. 1	..	..	
Total ..	4,413	Total ..	43-2-0	1,355	5,840
Head-quarter houses	578	Cart-roads	87-3-7$\frac{24}{44}$	3,624	..
Rest-houses	6,800	Bridle-paths	23-0-8$\frac{32}{40}$	638	..
Houses for subordinates	432	Others	11-1-5$\frac{4}{11}$	78	..
Others	766	*Add* as per Accountant-General's variations	..	323	..
Cost of establishment	6,157	....	..	..	..
Variations as per Accountant-General's audited figures	10	....	..	..	..
Total ..	14,743	Total ..	122-7-1$\frac{3}{44}$	4,663	19,406
....	..	A-VII (*c*)	..	..	..
....	..	Repairing wells	..	256	420
....	..	Removing silt	..	34	
....	..	Deepening wells	..	120	
....	..	Compound wall constructions	..	4	
....	..	Others	..	38	
....		*Deduct* as per Accountant-General's variations.	..	— 32	
Total ..	14,743		122-7-1$\frac{3}{44}$	5,083	19,826

Communications.

District.	New work undertaken during the year.					
	Buildings.		Roads and paths.			Total expenditure on new work.
	Description of building.	Expenditure incurred.	Road or path and object of the same.	Length of road or path.	Expenditure incurred.	
1	2	3	4	5	6	7
						Southern
		Rs.		Mls.	Rs.	Rs.
Vellore, North.	Head-quarter houses	830	Ghat-road	6	1,801	6,011
	Rest-houses	700	Cart-road	8	1,792	..
	Houses for subordinate establishments	888				
	Total ..	2,418	Total ..	14	3,593	6,011
Vellore, South.	Rest-houses	2,340	Bridle-path	5	162	4,121
	Houses for subordinate establishments	1,345				
	Others	274				
	Total ..	3,959	Total ..	5	162	4,121
South Arcot ..	Head-quarter houses ..	950	Bridle-path			
	Rest-houses	2,929	Cart-road	3⅝	767	5,909
	Houses for subordinate establishments	1,078		¼	184	..
	Others	2				
		4,959				
	Deduct cash recovery ..	— 1				
	Total ..	4,958	Total ..	3⅞	951	5,909
Salem, North ..	Head-quarter houses	6,360	Bridle-path	13½	1,151	15,967
	Rest-houses	5,357				
	Others	200	Cart-road	12½	2,899	..
	Total ..	11,917	Total ..	26	4,050	15,967
Salem, South ..	Rest-houses	3,690	Bridle-path	4½	1,314	10,585
	Houses for subordinate establishments	1,103	Cart-road	37⅞	* 4,388	..
	Others	90				
	Total ..	4,883	Total ..	41⅝	5,702	10,585
Trichinopoly ..	Rest-houses	1,511	....	..	..	3,605
	Houses for subordinate establishments	2,094				
	Total ..	3,605	Total ..	..	..	3,605
Madura ..	Rest-houses	4,658	Bridle-path	½	92	9,661
	Houses for subordinate establishments	3,237	Bridge	..	389	..
	Others	311	Cart-road	3	939	..
			Others	..	35	..
	Total ..	8,206	Total ..	3½	1,455	9,661

* Includes cost of preluissary tracing of 27¾ miles.

and Buildings—*cont.*

Repairs executed during the year.					
Buildings.		Roads and paths.			Total expended on repairs.
Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired.	Expenditure incurred.	
8	9	10	11	12	13
Circle.					
	RS.		MLS.	RS.	RS.
Rest-houses	488	Bridle-path	4¾	544	4,443
Houses for subordinate establishments, ...	98	Cart-road	47	2,747	..
Others	97				
	683	Add A-VII (*a*) ..	..	..	660
Add pay of establishments ..	469				
Total ..	1,152	Total ..	51¾	3,291	5,103
Head-quarter houses	101	Ghat-road	12	2,394	9,016
Rest-houses	1,423	Cart-road	17¾	3,402	..
Houses for subordinate establishments	988	Deduct cash recovery of service payment.	..	5,796 — 10	
Others	180				
	2,652	Add A-VII (*a*) ..	..	..	1,377
Add pay of establishments ..	539				
	3,231				
Deduct cash recovery	— 1				
Total ..	3,230	Total ..	29¾	5,786	10,393
Head-quarter houses	52	....	..	..	741
Rest-houses	90				
Houses for subordinate establishments	87				
	229				
Add pay of establishments ..	512	Add A-VII (*a*) ..	..	..	312
Total ..	741	Total ..	..	..	1,053
Rest-houses	472	Cart-road	79	2,427	3,320
Houses for subordinate establishments	161				
Others	50				
Add pay of establishments ..	210	Add A-VII (*a*) ..	..	..	1,526
Total ..	893	Total ..	79	2,427	4,846
Head-quarter houses	55	Bridle-path	12⅝	210	2,003
Rest-houses	1,046	Cart-road	4⅛	23	..
Houses for subordinate establishments	5				
Others	83				
Add pay of establishments ..	581	Add A-VII (*a*) ..	..	..	1,131
Total ..	1,770	Total ..	16⅞	233	3,134
Head-quarter houses	204	Ghat-road	13	502	4,018
Rest-houses	749	Bridle-path	81	1,986	..
Others	85	Cart-road	12	379	..
	1,038	Deduct cash recovery of service payment	106	2,867 — 761	..
Add Cost of establishments	874				
		Add A-VII (*a*) ..	..	..	86
Total ..	1,912	Total ..	106	2,106	4,104
Head-quarter houses	585	Bridle-path	41¼	1,812	11,421
Rest-houses	755	Bridge	..	601	..
Houses for subordinate establishments	550	Cart-road	67⅛	6,158	..
Others	271			8,571	
	2,161	Add as per Accountant-General's audited figure	..	+ 278	..
Add pay of establishments ..	1,092	Add A-VII (*a*) ..	..	..	441
	3,253				
Deduct as per Accountant-General's audited figure	—681				
Total ..	2,572	Total ..	109½	8,849	11,862

Communications

District.	New work undertaken during the year.					
	Buildings.		Roads and paths.			Total expenditure on new work.
	Description of building.	Expenditure incurred.	Road or path and object of the same.	Length of road or path.	Expenditure incurred.	
1	2	3	4	5	6	7
						Southern
		Rs.		Mls.	Rs.	Rs.
Tinnevelly ..	Rest-houses	490	Bridle-path	4⅛	291	3,656
	Houses for subordinate establishments	2,350	Bridge	..	33	..
	Others	66	Cart-road	1¾	426	..
				..	..	..
	Total ..	2,906	Total ..	5⅞	750	3,656
Total, Southern Circle.	Head-quarter houses	8,140	Ghat-road	6	1,801	59,515
	Rest-houses	21,675	Bridle-path	31¼	3,777	..
	Houses for subordinate establishments	12,095	Bridge	..	422	..
	Others	943	Cart-road	62⅝	10,628	..
		42,853	Others	..	35	..
	Deduct cash recovery ..	— 1				
	Total ..	42,852	Total ..	99⅞	16,663	59,515
						Western
South Canara ..	Head-quarter houses	820	Cart-roads	10	1,073	..
	Others	15	Others	2	45	..
	Total ..	835	Total ..	12	1,118	1,953
Malabar, North.	Rest-houses	647	Cart-roads	4	166	..
	Houses for subordinate establishments	2,076	Bridle-paths	5	22	..
	Others	800	Bridges	..	674	..
	Total ..	3,523	Total ..	9	862	4,385
Malabar, South.	Rest-houses	3,875	Bridle-paths	6	1,161	..
	Others	116		..	..	..
	Total ..	3,991	Total ..	6	1,161	5,152
The Nilgiris ..	Houses for subordinate establishments	3,171	Cart-roads	6	4,716	..
			Bridle-paths	8	492	..
	Total ..	3,171	Total ..	14	5,208	8,379

and Buildings—*cont.*

Repairs executed during the year.					
Buildings.		Roads and paths.			Total expended on repairs.
Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired	Expenditure incurred.	
8	9	10	11	12	13
Circle—cont.					
	Rs.		Mls.	Rs.	Rs.
Head-quarter houses	377	Ghat-road	2¼	393	3,446
Rest-houses	999	Bridle-path	37⅔	788	..
Houses for subordinate establishments	164	Bridge	..	32	..
Others	248	Cart-road	34⅔	879	..
	1,788	Total ..	74	2,092	..
Deduct as per Accountant-General's audited figure.	— 107	Deduct as per Accountant-General's audited figure	..	— 327	..
		Add A-VII (*o*) ..	..	..	59¢
		Deduct as per Accountant-General's audited figure	..	..	— 32
Total ..	1,681	Total ..	74	1,765	4,010
Head-quarter houses	1,374	Ghat-road	27¼	3,289	38,408
Rest-houses	6,022	Bridle-path	176⅔	5,340	..
Houses for subordinate establishments	2,053	Bridge	..	633	..
Others	1,014	Cart-road	262⅔	16,015	..
			466½	25,277	..
Add pay of establishments ..	4,277	Deduct cash recovery of service payment		— 771	..
	14,740		..	24,506	..
Deduct cash recovery	— 1	Deduct as per Accountant-General's audited figure		— 49	..
	14,739	Add A-VII (*o*) ..	..	..	6,129
Deduct as per Accountant-General's audited figure	— 788		..	..	— 32
Total ..	13,951	Total ..	466½	24,457	44,505
Circle.					
Head-quarter houses	90	Cart-roads	12	151	936
Rest-houses	21	Others	10	144	
Houses for subordinate establishments	100				
Others	122	Deduct cash recovery of service payments	..	—50	..
Add pay of watchers	360	Add A-VII (*o*) ..	..	..	71
Total ..	693	Total ..	22	243	1,007
		Cart-roads	94	2,959	
Rest-houses	1,084	Bridle-paths	3	318	
Houses for subordinate establishments	1,193	Bridges	..	322	6,640
Others	313		..	..	
Add pay of watchers, etc.	501	Add A-VII (*o*) ..	..	..	3,628
Total ..	3,041	Total ..	97	3,599	10,268
Head-quarter houses	558	Cart-roads	22	3,236	4,621
Rest-houses	121	Bridle-paths	69	255	
Houses for subordinate establishments	312	Bridges	..	27	..
Others	10				
Add pay of watchers	102	Add A-VII (*o*) ..	..	..	2,371
Total ..	1,103	Total ..	91	3,518	6,992
Rest-houses	233	Cart-roads	39	3,060	5,480
Houses for subordinate establishments	2,083	Bridle-paths	3	9	
Others	95				
		Add A-VII (*o*) ..	..	..	939
Total ..	2,411	Total ..	42	3,069	6,419

Communications

District	New work undertaken during the year.					
	Buildings.		Roads and paths.			Total expenditure on new work.
	Description of building.	Expenditure incurred.	Road or path and object of the same.	Length of road or path.	Expenditure incurred.	
1	2	3	4	5	6	7
						Western
		Rs.		MLS.	Rs.	Rs.
Kollegal ..	(a) Head-quarter houses .	1,140	(a) Cart-roads	6	2,105	..
	(b) Rest-houses	2,401				
	(c) Houses for subordinate establishments	49				
	Total ..	3,590	Total ..	6	2,105	5,695
Coimbatore, North.	(b) Rest-houses	2,876	(a) Cart-roads	3	697	..
	(c) Houses for subordinate establishments	2,591	(b) Ghat-roads	7	6,085	..
	(d) Others	372				
	Total ..	5,839	Total ..	10	6,782	12,621
Coimbatore, Central.	(a) Head-quarter houses ..	909	(a) Cart-roads	6	999	..
	(b) Rest-houses	1,356	(b) Bridle-paths	..	35	..
	(c) Houses for subordinate establishments	1,476	(c) Ghat-roads	..	6	..
	(d) Others	136				
	Total ..	3,877	Total ..	6	1,040	4,917
Coimbatore, South.	(b) Rest-houses	448	(a) Cart-roads	3	2,490	..
	(c) Houses for subordinate establishments . ..	1,691	(c) Ghat-roads	5	1,643	..
	(d) Others	811	(d) Bridges	..	3	..
			(e) Others	6	868	..
	Total ..	2,950	Total ..	14	4,904	7,854
Total, Western Circle.	(a) Head-quarter houses ..	2,869	(a) Cart-roads	38	12,246	..
	(b) Rest-houses	11,603	(b) Bridle-paths	19	1,710	..
	(c) Houses for subordinate establishments	11,054	(c) Ghat-roads	12	7,634	..
	(d) Others	2,260	(d) Bridges	..	677	..
			(e) Others	8	913	..
	Total ..	27,776	Total ..	77	23,180	50,956
Total, Presidency.	Head-quarters houses	16,521	Cart roads	216	39,156	..
	Rest-houses	44,280	Bridle-paths	116	11,594	..
	Houses for subordinate establishments	49,490	Ghat roads	33	17,827	..
			Bridges	..	1,458	..
	Others	11,245	Others	51	1,611	..
				..	..	..
		..		..	..	..
		..		..	..	..
	Grand total ..	121,536	Grand total ..	416	71,646	..

and Buildings—*cont.*

Repairs executed during the year.					
Buildings.		Roads and paths.			Total expended on repairs.
Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired.	Expenditure incurred.	
8	9	10	11	12	13
Circle—cont.					
	Rs.		Mls.	Rs.	Rs.
Head-quarter houses	193	Cart roads	49	3,312	5,096
Rest-houses	807	Ghat roads	2	19	
Houses for subordinate establishments.	60	Add pay of establishment	..	183	
Others	78				
Add pay of watche	443				
	*+ 1	Add A-VII (c) ..	..	..	1,547
Total ..	1,582	Total ..	51	3,514	6,643
Rest-houses	516	Cart roads	4	247	4,940
Others	11	Ghat roads	75	3,504	
Add pay of watchers	562	Bridges	..	114	
		Deduct cash recovery of service payments	..	— 14	
		Add A-VII (c) ..	..	..	1,196
Total ..	1,089	Total ..	79	3,851	6,136
Head-quarter houses	114	Cart roads	17	1,045	1,715
Rest-houses	226		..	*— 1	
Houses for subordinate establishments	121				
Others	187				
Add pay of watchers	23				
		Add A-VII (c) ..	..	..	166
Total ..	671	Total ..	17	1,044	1,881
Head-quarter houses	232	Cart-roads	20	2,077	4,757
Rest-houses	421	Bridle-paths	..	20	
Houses for subordinate establishments.	171	Ghat-roads	4	448	
		Bridges	..	130	
Others	286	Others	5	427	
Add pay of watchers	414	Add pay of establishment	.	131	
		Add A-VII (c) ..	..	..	280
Total ..	1,524	Total ..	29	3,233	5,037
Head-quarter houses	1,187				
Rest-houses	3,379	Cart-roads	257	16,087	34,185
Houses for subordinate establishments.	4,040	Bridle-paths	75	602	
		Ghat-roads	81	3,971	
(d) Others	1,102	Bridges		593	
Add pay of watchers	2,405	Others	15	569	
	*+ 1	Add pay of temporary establishment ..	..	314	
		Deduct cash recovery of service payment.	..	—64	
				*— 1	
		Add A-VII (c) ..	..	..	10,198
Total ..	12,114	Total ..	428	22,071	44,383
Head-quarter houses	3,139	Cart-roads	976	41,449	..
Rest-houses	19,303	Bridle-paths	285	6,638	..
Houses for subordinate establishments.	8,418	Ghats-roads	810	7,288	..
		Bridges	..	1,226	..
Others	5,735	Others	41	797	..
Total ..	36,595	Total ..	211 2	57,398	..
Add pay of establishments	20,231	Add pay of establishments	..	1,224	..
Total ..	56,826	Total ..	..	58,622	..
Deduct as per Accountant-General's figures.	747	Deduct cash recoveries	..	836	..
		Add as per Accountant-General's figures.	..	291	..
Deduct amount expunged (Rs. 10 in the Northern circle) and cash recovery of Re. 1 in the Southern circle.	11	Total ..	..	58,077	1,14,145
		Add A-VII (c) ..	..	..	29, 111
Grand total ..	56,068	Grand total ..	..	58,077	1,43, 256

* Added or deducted as per Accountant-General's audited figures.

ANNUAL

Forest Department,

REGISTER of Breaches of

District.		Cases pending from 1912–13.	New cases of the year.					Total cases.
			Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	
1		2	3	4	5	6	7	8
								NORTHERN.
								Reserved
Ganjam	A	(a) 26	..	30	7	1	38	64
	B	53	..	324	22	3	349	402
	C	..	40	27	..	..	67	..
	Total ..	(b) 79	(c) 40	(d) 381	(e) 29	(f) 4	(g) 454	(h) 466
Vizagapatam ..	A	(a) 26	1	55	6	18	80	106
	B	(a) 39	..	212	31	26	269	308
	C	..	19	..	..	..	19	..
	Total ..	65	20	267	37	44	368	414
Godavari, Upper.	A	1	1	1	..	1	3	4
	B	5	2	19	5	..	26	31
	C	..	44	..	..	..	44	..
	Total ..	6	47	20	5	1	73	35
Godavari, Lower.	A	21	2	35	6	4	47	68
	B	68	1	107	45	15	168	236
	C	..	..	1	..	..	1	..
	Total ..	89	3	143	51	19	216	304
Kistna	A	(a) 38	2	38	29	3	72	110
	B	(a) 41	..	98	188	11	297	338
	C	..	..	10	..	..	10	..
	Total ..	79	2	146	217	14	379	448
Kurnool, East ..	A	(a) 14	..	30	40	6	76	90
	B	(a) 21	..	116	143	11	270	291
	C	..	..	4	1	2	7	..
	Total ..	35	..	150	184	19	353	381
Do. South ..	A	(a) 89	2	119	28	10	159	198
	B	(a) 29	..	316	127	17	460	489
	C	..	36	49	1	1	87	..
	Total ..	68	38	484	156	28	706	687
Do. West ..	A	(a) 63	1	120	58	8	187	250
	B	(a) 37	..	372	178	11	561	598
	C	..	37	39	3	1	80	..
	Total ..	100	38	531	239	20	828	848

A = Cases taken to Court.
B = Case compounded by District Forest Officer or Revenue Divisional Officer.
C = Cases undetected.

(a) The variations between the closing balance of 1912-13 and the opening balance of 1913-14 are due to transfer of cases between A and B.

(b) Excludes 66 cases belonging to Parlakimedi Maliahs.
(c) Do. 6 do. do
(d) Do. 174 do. do.
(e) Do. 9 do do.
(f) Do. 20 do. do.

FORM No. 71.

Madras Presidency.

Forest Rules during 1913–14.

Disposed of during the year.						Cases pending at close of the year.
Convictions.		Acquittals.		Total.		
Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
9	10	11	12	13	14	15
CIRCLE.						
Forests.						
49	128	5	6	54	134	10
276	1,055	..	..	276	1,055	56
				* 70	193	
..	..	..	..	..	..	..
(i) 325	(j) 1,183	(k) 5	(l) 6	(m) 330	(n) 1,189	(o) 66
				* 70	193	
73	220	28	106	101	326	4
				* 1	1	
268	576	..	..	268	576	34
				* 6	29	
..	..	..	..	..	..	..
341	796	28	106	369	902	38
				* 7	30	
4	18	..	..	4	18	..
17	32	..	..	17	32	6
				* 8	26	
..	..	..	..	..	..	..
21	50	..	..	21	50	6
				* 8	26	
41	162	5	16	46	178	22
174	410	..	..	174	410	43
				* 19	54	
..	..	..	..	..	..	..
215	572	5	16	220	588	65
				* 19	54	
97	283	5	52	102	335	8
208	592	..	..	208	592	54
				* 76	204	
..	..	..	..	..	..	..
305	875	5	52	310	927	62
				* 76	204	
64	240	3	12	67	252	23
229	607	..	..	229	607	46
				* 16	38	
..	..	..	..	..	..	..
293	847	3	12	296	859	69
				* 16	38	
166	655	5	8	171	663	27
355	1,047	..	..	355	1,047	68
				* 66	327	
..	..	..	..	..	..	..
521	1,702	5	8	526	1,710	95
				* 66	327	
184	525	19	88	203	613	42
				* 5	17	
463	1,029	..	..	463	1,029	133
				* 2	7	
..	..	..	..	..	..	..
647	1,554	19	88	666	1,642	175
				* 7	24	

* Cases withdrawn under the orders of the District Forest Officer or Revenue Divisional Officer.

(*g*) Excludes 209 cases belonging to Parlākimedi Maliahs.
(*h*) Do. 275 do. do.
(*i*) Do. 187 do. do.
(*j*) Do. 518 persons involved in 187 cases belonging to Parlākimedi Maliahs.
(*k*) Do. 31 cases belonging to Parlākimedi Maliahs.
(*l*) Do. 108 persons involved in 31 cases belonging to Parlākimedi Maliahs.
(*m*) Do. 218 cases belonging to Parlākimedi Maliahs.
(*n*) Do. 736 persons involved in 218 cases belonging to Parlākimedi Maliahs.
(*o*) Do. 57 pending cases belonging to Parlākimedi Maliahs.

Register of Breaches of

District.		Cases pending from 1912-13.	New cases of the year.					Total cases.
			Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	
1		2	3	4	5	6	7	8
								NORTHERN
								Reserved
Total for reserved forests,	A	228	9	428	174	51	662	890
	B	293	3	1,564	739	94	2,400	2,693
	C	..	176	130	5	4	315	..
	Total ..	521	188	2,122	918	149	3,377	3,583
								Unreserved
Ganjam ..	A	7	..	25	..	..	25	32
	B	12	..	107	..	..	107	119
	C	..	..	18	..	..	18	..
	Total .	19	..	150	..	..	150	151
Vizagapatam ..	A	..	..	1	..	..	1	1
	B	6	..	34	..	..	34	40
	C .. .	..	..	..	..	..	..	..
	Total ..	6	..	35	..	..	35	41
Godavari, Upper.	A	..	..	..	..	1	1	1
	B	3	1	39	1	14	55	58
	C	..	44	..	..	..	44	..
	Total ..	3	45	39	1	15	100	59
Do. Lower.	A	3	..	8	..	2	10	13
	B	9	..	87	2	22	111	120
	C	..	..	..	..	..	..	..
	Total ..	12	..	95	2	24	121	133
Kistna	A	..	..	4	..	..	4	4
	B	20	..	104	..	3	107	127
	C	..	..	9	..	1	10	..
	Total ..	20	..	117	..	4	121	131
Kurnool, East ..	A	..	..	..	..	..	..	..
	B	..	..	40	..	..	40	40
	C		..	1	..	..	1	..
	Total ..	..	..	41	..	..	41	40
Do. South ..	A	..	..	5	..	..	5	5
	B	..	..	27	..	1	28	28
	C	..	..	8	..	..	8	..
	Total ..	..	..	40	..	1	41	33
Do. West ..	A	1	..	14	..	..	14	15
	B	3	1	109	..	..	110	113
	C	..	..	13	..	..	13	..
	Total ..	4	1	136	..	..	137	128

A = Cases taken to Court.
B = Cases compounded by District Forest Officer or Revenue Divisional Officer.
C = Cases undetected.

Forest Rules during 1913–14—*cont.*

Disposed of during the year.						Cases pending at close of the year.
Convictions.		Acquittals.		Total.		
Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
9	10	11	12	13	14	15
CIRCLE—*cont.*						
Forests—cont.						
678	2,231	70	288	748	2,519	136
				* 6	18	
1,990	5,348	..	..	1,990	5,348	440
				* 263	878	
..	..	..	..	..	..	..
2,668	7,579	70	288	2,738	7,867	576
				* 269	896	
Lands.						
25	52	3	11	28	63	4
82	187	..	..	82	187	7
				* 30	68	
..	..	..	..	..	..	..
107	239	3	11	110	250	11
				* 30	68	
1	3	..	..	1	3	..
33	48	..	..	33	48	7
..	..	..	..	..	..	..
34	51	..	..	34	51	7
..	..	..	..	* 1	2	..
24	55	..	..	24	55	16
				* 18	54	
..	..	..	..	..	..	..
24	55	..	..	24	55	16
				* 19	56	
4	4	2	2	6	6	7
81	122	..	..	81	122	31
				* 8	21	
..	..	..	..	..	..	..
85	126	2	2	87	128	38
				* 8	21	
3	3	1	3	4	6	..
109	141	..	..	109	141	12
				* 6	8	
..	..	..	..	..	..	..
112	144	1	3	113	147	12
				* 6	8	
..	..	..	..	..	..	..
40	61	..	..	40	61	..
..	..	..	..	..	..	..
40	61	..	..	40	61	..
2	2	..	..	2	2	3
27	58	..	..	27	58	..
				* 1	1	
..	..	..	..	..	..	..
29	60	..	..	9	60	3
				* 1	1	
9	24	..	..	9	24	6
108	170	..	..	108	170	5
..		..	..	..	..	..
117	194	..	..	117	194	11

* Cases withdrawn under the orders of the District Forest Officer or Revenue Divisional Officer.

Register of Breaches of

District.		Cases pending from 1912–13.	New cases of the year.					Total cases.
			Injury to forests by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	
1		2	3	4	5	6	7	8
								NORTHERN
								Unreserved
Total for unreserved lands.	A	11	..	57	..	3	60	71
	B	53	2	547	3	40	592	645
	C	..	44	49	..	1	94	..
	Total ..	64	46	653	3	44	746	716
Total for reserved forests and unreserved lands.	A	239	9	485	174	54	722	961
	B	346	5	2,111	742	134	2,992	3,338
	C	..	220	179	5	5	409	..
	Grand Total ..	585	234	2,775	921	193	4,123	4,299
								CENTRAL
								Reserved
Bellary	A	(*a*) 53	..	82	63	12	157	210
	B	(*a*) 87	2	296	461	38	797	884
	C	..	..	3	98	..	101	..
	Total ..	140	2	381	622	50	1,055	1,094
Anantapur ..	A	78	..	122	80	4	206	284
	B	..	..	152	140	13	305	305
	C	..	108	31	146	1	286	..
	Total ..	78	108	305	366	18	797	589
Guntur	A	21	1	225	224	15	465	486
	B	332	1	311	497	21	830	1,162
	C	..	..	..	..	..	..	..
	Total ..	353	2	536	721	36	1,295	1,648
Cuddapah, West ..	A	33	2	109	76	20	207	240
	B	16	1	229	151	110	491	507
	C	..	..	4	1	..	5	..
	Total ..	49	3	342	228	130	763	747
Cuddapah, East..	A	(*a*) 97	4	172	45	5	226	323
	B	(*a*) 43	..	383	122	13	518	561
	C	..	..	4	1	..	5	..
	Total .	140	4	559	168	18	749	884
Nellore	A	(*a*) 95 (*b*)	2	107	246	10	365	460
	B	(*a*) 81 (*b*)	..	372	752	17	1,141	1,222
	C	..	6	..	1	..	7	..
	Total ..	176	8	479	999	27	1,513	1,682

A = Cases taken to Court.
B = Cases compounded by District Forest Officer or Revenue Divisional Officer.
C = Cases undetected.

(*a*) Variations between the closing balance of 1912–13 and the opening balance of 1913–14 are due to transfers between A and B.

(*b*) The difference of 1 is due to the inclusion an undetected case in the last year's closing balance.

Forest Rules during 1913-14—*cont.*

Disposed of during the year.						Cases pending at close of the year.
Convictions.		Acquittals.		Total.		
Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
9	10	11	12	13	14	15
CIRCLE—*cont.*						
Lands—cont.						
44	88	6	16	50	104	20
				* 1	2	
504	842	..	..	504	842	78
				* 63	152	
..	..	..	..	..	..	..
548	930	6	16	554	946	98
				* 64	154	
722	2,319	76	304	798	2,623	156
				* 7	20	
2,494	6,190	..	..	2,494	6,190	518
				* 326	1,030	
..	..	..	..	..	..	..
3,216	8,509	76	304	3,292	8,813	674
				* 333	1,050	
CIRCLE.						
Forests.						
186	559	15	54	201	613	9
649	1,573	..	..	649	1,573	181
				* 54	106	
..	..	..	..	..	..	..
835	2,132	15	54	850	2,186	190
				* 54	106	
164	353	42	164	206	517	78
271	565	..	..	271	565	..
				* 34	113	
..	..	..	..	..	..	..
435	918	42	164	477	1,082	78
				* 34	113	
241	824	14	38	255	862	231
1,054	2,835	..	..	1,054	2,835	56
				52	222	
..	..	..	..	..	..	..
1,295	3,659	14	38	1,309	3,697	287
				* 52	222	
185	395	8	55	193	450	47
252	760	..	..	252	760	216
				* 39	100	
..	..	..	..	..	..	..
437	1,155	8	55	445	1,210	263
				* 39	100	
269	695	17	81	286	776	37
407	940	..	..	407	940	93
				* 61	172	
..	..	..	..	..	..	..
676	1,635	17	81	693	1,716	130
				* 61	172	
362	877	35	174	397	1,051	63
830	1,551	..	..	830	1,551	182
				* 210	531	
..	..	..	..	..	..	..
1,192	2,428	35	174	1,227	2,602	245
				* 210	531	

* Cases withdrawn under the orders of the District Forest Officer or Revenue Divisional Officer.

Register of Breaches of

District.		Cases pending from 1912-13.	New cases of the year.					Total cases.
			Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	
1		2	3	4	5	6	7	8
								CENTRAL
								Reserved
Chingleput ..	A	5	..	112	46	7	165	170
	B	251	..	752	447	17	1,216	1,467
	C	..	4	2	..	..	6	..
	Total ..	256	4	866	493	24	1,387	1,637
Chittoor	A	34	1	117	87	32	237	271
	B	74	..	552	423	68	1,043	1,117
	C .. .	..	79	..	..	..	79	..
	Total ..	108	80	669	510	100	1,359	1,388
Total for reserved forests	A	416	10	1,046	867	105	2,028	2,444
	B ..	884	4	3,047	2,993	297	6,341	7,225
	C	..	197	44	247	1	489	..
	Total .	1,300	211	4,137	4,107	403	8,858	9,669
								Unreserved
Bellary	A	(a) 4	..	17	..	4	21	25
	B	(a) 28	..	138	..	10	148	176
	C	..	..	..	..	..	..	..
	Total ..	32	..	155	..	14	169	201
Anantapur ..	A	64	..	113	..	2	115	179
	B .. .	..	..	204	..	..	204	204
	C .. .	..	..	4	..	..	4	..
	Total ..	64	..	321	..	2	323	383
Guntur	A	12	..	5	..	..	5	17
	B	57	..	291	..	46	337	394
	C	..	..	..	..	..	.	..
	Total ..	69	..	296	..	46	342	411
Cuddapah, West ..	A	..	..	3	..	..	3	3
	B	..	..	96	..	..	96	96
	C	..	..	..	..	..	..	..
	Total ..	..	..	99	..	..	99	99
Cuddapah, East	A	..	..	..	..	..	..	..
	B	..	..	28	..	..	28	28
	C	..	..	1	..	..	1	..
	Total ..	..	..	29	..	..	29	28
Nellore	A	(a) 7	..	33	..	..	33	40
	B .. .	(a) 61	..	285	..	..	285	346
	C	..	..	139	..	..	139	..
	Total ..	68	..	457	..	..	457	386

A = Cases taken into Court.
B = Cases compounded by District Forest Officer or Revenue Divisional Officer.
C = Cases undetected.

(a) Variations between the closing balance of 1912-13 and the opening balance of 1913-14 are due to transfers between A and B.

Forest Rules during 1913-14—*cont.*

Disposed of during the year.						Cases pending at close of the year.
Convictions.		Acquittals.		Total.		
Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
9	10	11	12	13	14	15
CIRCLE—*cont.*						
Forests—cont.						
155	305	1	1	156	306	14
1,252	1,764	..	..	1,252	1,764	123
..	..	..	..	* 92	120	
				..	..	..
1,407	2,069	1	1	1,408	2,070	137
				* 92	120	
194	448	16	63	210	511	61
893	1,399	..	..	893	1,399	120
..	..	..	..	* 104	333	
				..	..	..
1,087	1,847	16	63	1,103	1,910	181
				* 104	333	
1,756	4,456	148	630	1,904	5,086	540
5,608	11,387	..	..	5,608	11,387	971
..	..	..	..	* 646	1,697	
				..	..	..
7,364	15,843	148	630	7,512	16,473	1,511
				* 646	1,697	
Lands.						
19	26	6	15	25	41	..
140	179	..	..	140	179	29
..	..	..	..	* 7	7	
				..	..	..
159	205	6	15	165	220	29
				7	7	
90	184	29	38	119	222	60
204	484	..	..	204	484	..
..	..	..	..	..	..	..
294	668	29	38	323	706	60
3	3	1	1	4	4	13
301	632	..	..	301	632	55
..	..	..	..	* 38	74	
				..	..	..
304	635	1	1	305	636	68
				* 38	74	
3	7	..	..	3	7	..
96	128	..	..	96	128	..
..	..	..	..	..	..	..
99	135	..	..	99	135	..
..	..	..	..	..	..	..
28	30	..	..	28	30	..
..	..	..	..	..	..	..
28	30	..	..	28	30	..
31	79	5	7	36	86	4
277	438	..	..	277	438	64
..	..	..	..	* 5	* 21	
				..	..	..
308	517	5	7	313	524	68
				* 5	21	

* Cases withdrawn under the orders of the District Forest Officer or Revenue Divisional Officer.

Register of Breaches of

District.		Cases pending from 1912–13.	New cases of the year. Injury to forests by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	Total cases.
1		2	3	4	5	6	7	8
CENTRAL								
Unreserved								
Chinglepu ..	A	4	..	11	..	..	11	15
	B	3	..	126	..	..	126	129
	C	..	..	..	..	..	..	..
	Total ..	7	..	137	..	..	137	144
Chittoor	A	..	..	..	..	..	..	..
	B	..	..	98	..	..	98	98
	C	..	..	..	..	..	..	..
	Total ..	..	..	98	..	..	98	98
Total for unreserved lands.	A	91	..	182	..	6	188	279
	B*	149	..	1,266	..	56	1,322	1,471
	C	..	..	144	..	..	144	..
	Total ..	240	..	1,592	..	62	1,654	1,750
Total for reserved forests and unreserved lands.	A	507	10	1,228	867	111	2,216	2,723
	B	1,033	4	4,313	2,993	353	7,663	8,696
	C	..	197	188	247	1	633	..
	Grand Total ..	1,540	211	5,729	4,107	465	10,512	11,419
SOUTHERN								
Reserved								
North Vellore.	A	99	..	115	100	11	226	325
	B	71	..	798	405	3	1,206	1,277
	C	..	39	..	..	..	39	..
	Total ..	170	39	913	505	14	1,471	1,602
South Vellore.	A	50 + 74	..	106	25	11	142	266
	B	206 — 74	1	579	197	54	831	963
	C	..	52	6	3	2	63	..
	Total ..	256	53	691	225	67	1,036	1,229
South Arcot ..	A	12 + 142	..	333	155	9	497	651
	B	236 — 142	..	715	623	9	1,347	1,441
	C	..	8	9	2	..	19	..
	Total ..	248	8	1,057	780	18	1,863	2,092
North Salem ..	A	90	..	370	97	13	480	570
	B	100	..	654	203	23	880	980
	C	..	50	..	..	..	50	..
	Total ..	190	50	1,024	300	36	1,410	1,550

A = Cases taken in Court.
B = Cases compounded by District Forest Officer or Revenue Divisional Officer.
C = Cases undetected.

NOTE (*Southern Circle*).—Alterations in column 2 represent transfers between A and B.

Forest Rules during 1913-14—*cont.*

Disposed of during the year.						Cases pending at close of the year.
Convictions.		Acquittals.		Total.		
Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
9	10	11	12	13	14	15
CIRCLE—*cont.*						
Lands—cont.						
13	13	..	..	13	13	2
124	124	..	..	124	124	4
..	..	..	..	* 1	1	
				..	..	..
137	137	..	..	137	137	6
				* 1	1	
..	..	..	..	..	..	..
98	177	..	..	98	177	..
..	..	..	..	..	..	..
98	177	..	..	98	177	..
159	312	41	61	200	373	79
1,268	2,192	..	..	1,268	2,192	152
..	..	..	..	* 51	103	
				..	..	..
1,427	2,504	41	61	1,468	2,565	231
				* 51	103	
1,915	4,768	189	691	2,104	5,459	619
6,876	13,579	..	..	6,876	13,579	1,123
..	..	..	..	* 697	1,800	
				..	..	..
8,791	18,347	189	691	8,980	19,038	1,742
				* 697	1,800	
CIRCLE.						
Forests.						
214	290	15	42	229	332	84
				* 12	34	
1,034	2,162	..	..	1,034	2,162	137
				* 106	141	
..	..	..	..	..	..	..
1,248	2,452	15	42	1,263	2,494	221
				* 118	175	
211	505	19	42	230	547	36
731	1,546	..	..	731	1,546	203
..	..	..	..	* 29	60	
				..	..	..
942	2,051	19	42	961	2,093	239
				* 29	60	
577	1,430	7	24	584	1,454	7
				* 60	121	
1,131	1,895	..	..	1,131	1,895	307
				* 3	13	
..	..	..	..	..	..	..
1,708	3,325	7	24	1,715	3,349	314
				* 63	134	
513	1,247	21	65	534	1,312	36
777	1,659	..	..	777	1,659	203
..	..	..	..	..	..	..
1,290	2,906	21	65	1,311	2,971	239

* Cases withdrawn under the orders of the District Forest Officer or Revenue Divisional Officer.

Register of Breaches of Forest

District.		Cases pending from 1912–13.	New cases of the year.					Total cases.
			Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	
1		2	3	4	5	6	7	8
								SOUTHERN
								Reserved
South Salem ..	A	93	1	237	27	29	294	387
	B	148	..	283	72	12	367	515
	C	..	43	16	..	..	59	..
	Total ..	241	44	536	99	41	720	902
Trichinopoly *cum* Tanjore.	A	16 + 47	3	103	123	31	260	323
	B	251 — 47	..	302	439	83	824	1,028
	C	..	4	1	..	..	5	..
	Total	267	7	406	562	114	1,089	1,351
Madura ..	A	21	3	164	66	29	262	283
	B	403	..	681	320	51	1,052	1,455
	C	..	72	..	..	..	72	..
	Total ..	424	75	845	386	80	1,386	1,738
Tinnevelly *cum* Ramnad.	A	14	2	43	89	9	143	157
	B	59	2	213	267	6	488	547
	C	..	40	26	4	2	72	..
	Total ..	73	44	282	360	17	703	704
Total, Southern Circle.	A	658	9	1,471	682	142	2,304	2,962
	B	1,211	3	4,225	2,526	241	6,995	8,206
	C ..	..	308	58	9	4	379	..
	Total ..	1,869	320	5,754	3,217	387	9,678	11,168
								Unreserved
North Vellore.	A	..	..	18	..	..	18	18
	B	162	..	354	..	..	354	516
	C	..	..	..	..	..	..	..
	Total ..	162	..	372	..	..	372	534
South Vellore.	A	..	..	..	..	3	3	3
	B	54	..	79	..	46	125	179
	C	..		..	..	7	7	..
	Total ..	54	..	79	..	56	135	182
South Arcot ..	A	46 + 21	..	101	..	..	101	168
	B	212 — 21	..	637	..	2	639	830
	C ..	..	..	70	..	..	70	..
	Total ..	258	..	808	..	2	810	998

A = Cases taken to Court.
B = Cases compounded by District Forest Officer or Revenue Divisional Officer.
C = Cases undetected.

NOTE.—Alterations in column 2 represent transfers between A and B.

Rules during 1913-14— *cont.*

Disposed of during the year.						Cases pending at close of the year.
Convictions.		Acquittals.		Total.		
Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
9	10	11	12	13	14	15
CIRCLE—*cont.*						
Forests—cont.						
310	1,322	11	20	321	1,342	3
349	1,389	..	..	349	1,389	144
..	..	..	..	* 22	39	..
659	2,711	11	20	670	2,731	210
				* 22	39	
179	435	30	129	209	564	36
				* 78	262	
840	1,765	..	..	840	1,765	177
				* 11	22	
..	..	..	..	..	..	..
1,019	2,200	30	129	1,049	2,329	213
				* 89	284	
183	496	30	106	213	602	70
883	2,903	..	..	883	2,903	493
				* 79	324	
..	..	..	..	..	..	..
1,066	3,399	30	106	1,096	3,505	563
				* 79	324	
136	390	11	62	147	452	10
466	803	..	..	466	803	75
				* 6	12	
..	..	..	..	..	..	..
602	1,193	11	62	613	1,255	85
				* 6	12	
2,323	6,115	144	490	2,467	6,605	345
				* 150	417	
6,211	14,122	..	..	6,211	14,122	1,739
				* 256	611	
..	..	..	..	..	..	..
8,534	20,237	144	490	8,678	20,727	2,084
				* 406	1,028	
Lands.						
10	12	7	10	17	22	1
416	557	..	..	416	557	90
				* 10	14	
..	..	..	..	..	..	..
426	569	7	10	433	579	91
				* 10	14	
1	1	..	..	1	1	2
127	226	..	..	127	226	49
				* 3	10	
..	..	..	..	..	..	..
128	227	..	..	128	227	51
				* 3	10	
77	100	8	23	85	123	74
				* 9	10	
634	995	..	..	634	995	192
				* 4	10	
..	..	..	..	..	..	..
711	1,095	8	23	719	1,118	266
				* 13	20	

* Cases withdrawn under the orders of the District Forest Officer or Revenue Divisional Officer.

Register of Breaches of Forest

District		Cases pending from 1912–13.	New cases of the year.					Total cases.
			Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	
1		2	3	4	5	6	7	8
								SOUTHERN *Unreserved*
North Salem ..	A	2	1	16	..	6	23	25
	B	..	..	18	..	4	22	22
	C	..	..	..	..	..	..	..
	Total ..	2	1	34	..	10	45	47
South Salem ..	A	..	..	..	..	..	..	..
	B	..	..	192	..	..	192	192
	C	..	..	..	..	..	..	..
	Total ..	..	..	192	..	..	192	192
Trichinopoly *cum* Tanjore	A	+ 2	..	173	..	..	173	175
	B ..	166 { − 2 − 53 * }	2	1,094	221	46	1,363	1,474
	C	..	..	..	..	..	..	..
	Total ..	113	2	1,267	221	46	1,536	1,649
Madura ..	A	† 2	..	33	..	..	33	35
	B	† 10	..	308	..	4	312	322
	C	..	..	13	..	..	13	..
	Total ..	12	..	354	..	4	358	357
Tinnevelly *cum* Rāmnād.	A	3	..	56	..	8	64	67
	B	59	..	290	..	15	305	364
	C	..	..	48	..	..	48	..
	Total ..	62	..	394	..	23	417	431
Total of Circle.	A	76	1	397	..	17	415	491
	B	587	2	2,972	221	117	3,312	3,899
	C	..	..	131	..	7	138	..
	Total ..	663	3	3,500	221	141	3,865	4,390
Total for reserved forests and unreserved lands.	A	734	10	1,868	632	159	2 719	3,453
	B	1,798	5	7,197	2,747	358	10,307	12,105
	C	..	308	189	9	11	517	..
	Grand Total ..	2,532	323	9,254	3,438	528	13,543	15,558
								WESTERN *Reserved*
South Canara..	A	(*a*) 49	7	69	6	28	110	159
	B	(*a*) 183	55	1,004	107	86	1,252	1,435
	C	..	117	..	..	..	117	..
	Total ..	232	179	1,073	113	114	1,479	1,594
Malabar, North.	A	4	1	1	3	3	8	12
	C	..	5	..	..	..	5	..
	Total ..	4	6	1	3	3	13	12

A = Cases taken to Court.
B = Cases compounded by District Forest Officer or Revenue Divisional Officer.
C = Cases undetected.

NOTE (*Southern Circle*).—Alterations in column 2 represent transfers between A and B.

* Deducted as per revised figures furnished by the District Forest Officer.
† This was not shown in last year's return as particulars were not then available.

(*a*) The variations between the closing balance of 1912–13 and these figures are due to transfers between heads A and B.

Rules during 1913-14—*cont.*

Disposed of during the year.						Cases pending at close of the year.
Convictions.		Acquittals.		Total.		
Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
9	10	11	12	13	14	15
CIRCLE—*cont.*						
Lands—cont.						
24	45	1	1	25	46	..
22	35	..	..	22	35	..
..	..	..	..	..	..	..
46	80	1	1	47	81	..
..	..	..	..	..	..	..
192	376	..	..	192	376	..
..	..	..	..	..	..	..
192	376	..	..	192	376	..
175	302	..	..	175	302	..
1,341	1,824	..	..	1,341	1,824	133
..	..	..	..	..	..	..
1,516	2,126	..	..	1,516	2,126	133
27	52	4	8	31	60	4
251	435	..	..	251	435	71
..	..	..	..	..	..	..
278	487	4	8	282	495	75
53	103	2	16	55	119	12
197	352	..	..	197	352	102
				‡ 65	119	
..	..	..	..	..	..	..
250	455	2	16	252	471	114
				‡ 65	119	
367	615	22	58	389	673	93
				‡ 9	10	
3,180	4,800	..	..	3,180	4,800	637
				‡ 82	153	
..	..	..	..	..	..	..
3,547	5,415	22	58	3,569	5,473	730
				‡ 91	163	
2,690	6,730	166	548	2,856	7,278	438
				‡ 159	427	
9,391	18,922	..	..	9,391	18,922	2,376
				‡ 338	764	
..	..	..	..	..	..	..
12,081	25,652	166	548	12,247	26,200	2,814
				‡ 497	1,191	
CIRCLE.						
Forests.						
118	202	11	20	129	222	28
				‡ 2	3	
1,182	2,405	..	..	1,182	2,405	175
				‡ 78	194	
..	..	..	..	..	..	..
1,300	2,607	11	20	1,311	2,627	203
				‡ 80	197	
9	24	2	2	11	26	1
..	..	..	..	..	..	..
9	24	2	2	11	26	1

‡ Cases withdrawn under the orders of the District Forest Officer or Revenue Divisional Officer.

Register of Breaches of Forest

District.		Cases pending from 1912-13.	New cases of the year.					Total cases.
			Injury to forests by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	
1		2	3	4	5	6	7	8
								WESTERN
								Reserved
Malabar, South.	A	..	2	5	3	..	10	10
	B	1	..	2	5	1	8	9
	C	..	3	..	..	..	3	..
	Total ..	1	5	7	8	1	21	19
The Nilgiris ..	A	10	1	30	12	7	50	60
	B	9	2	60	51	28	141	150
	C	..	32	..	..	..	32	..
	Total ..	19	35	90	63	35	223	210
Kollegal ..	A	(*a*) 32	1	12	26	9	48	80
	B	(*a*) 19	..	48	78	13	139	158
	C	..	34	7	..	..	41	..
	Total ..	51	35	67	104	22	228	238
Coimbatore, North.	A	(*a*) 57	7	58	14	5	84	141
	B	(*a*) 56	2	112	82	19	215	271
	C	..	82	7	..	..	89	..
	Total ..	113	91	177	96	24	388	412
Coimbatore, Central.	A	8	3	85	25	14	127	135
	B	71	2	194	78	38	312	383
	C	..	23	..	..	..	23	..
	Total ..	79	28	279	103	52	462	518
Coimbatore, South.	A	7	1	62	23	6	92	99
	B	14	..	63	53	5	121	135
	C	..	35	2	..	..	37	..
	Total ..	21	36	127	76	11	250	234
Total for reserved forests.	A	167	23	322	112	72	529	696
	B	353	61	1,483	454	190	2,188	2,541
	C	..	331	16	..	..	347	..
	Total ..	520	415	1,821	566	262	3,064	3,237
								Unreserved
South Canara ..	A	(*a*) 15	2	24	..	7	33	48
	B	(*a*) 29	1	102	..	19	122	151
	C	..	..	3	..	..	3	..
	Total ..	44	3	129	..	26	158	199
Malabar, North.	B	..	..	10	..	..	10	10

A = Cases taken to Court.
B = Cases compounded by District Forest Officer or Revenue Divisional Officer.
C = Cases undetected.

(*a*) The variations between the closing balance of 1912-13 and these figures are due to transfers between heads A and B.

Rules during 1913-14—*cont.*

Disposed of during the year.						Cases pending at close of the year.
Convictions.		Acquittals.		Total.		
Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
9	10	11	12	13	14	15
CIRCLE—*cont.*						
Forests—cont.						
6	18	1	10	7	28	1
9	18	..	..	* 2	5	
..	..	..	..	9	18	..
				..	..	..
15	36	1	10	16	46	1
				* 2	5	
49	170	4	12	53	182	7
106	245	..	..	106	245	6
..	..	..	..	* 38	82	
				..	..	..
155	415	4	12	159	427	13
				* 38	82	
46	179	8	37	54	216	25
				* 1	1	
104	252	..	..	104	252	27
				* 27	65	
..	..	..	..	..	..	..
150	431	8	37	158	468	52
				* 28	66	
110	399	5	10	115	409	26
175	584	..	..	175	584	34
				* 62	212	
..	..	..	..	..	..	..
285	983	5	10	290	993	60
				* 62	212	
92	279	14	54	106	333	29
307	790	..	..	307	790	54
				* 22	84	
..	..	..	..	..	..	..
399	1,069	14	54	413	1,123	83
				* 22	84	
80	225	2	7	82	232	17
107	324	..	..	107	324	22
				* 6	19	
..	..	..	..	..	..	..
187	549	2	7	189	556	39
				* 6	19	
510	1,496	47	152	557	1,648	134
				* 5	9	
1,990	4,618	..	..	1,990	4,618	318
				* 233	656	
..	..	..	..	..	..	..
2,500	6,114	47	152	2,547	6,266	452
				* 238	665	
Lands.						
35	41	7	14	42	55	6
114	182	..	..	114	182	26
				* 11	18	
..	..	..	..	..	..	..
149	223	7	14	156	237	32
				* 11	18	
10	12	..	..	10	12	..

* Cases withdrawn under the orders of the District Forest Officer or Revenue Divisional Officer.

Register of Breaches of Forest

District.		Cases pending from 1912–13.	New cases of the year.					Total cases.
			Injury to forests by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	
1		2	3	4	5	6	7	8
								WESTERN
								Unreserved
Malabar, South	A .. .	..	..	2	..	1	3	3
	B	..	..	2	..	1	3	3
	Total ..	..	..	4	..	2	6	6
Kollegal ..	A	(*a*) 3	..	4	..	..	4	7
	B	(*a*) 8	..	44	..	..	44	47
	C	..	..	1	..	..	1	..
	Total ..	6	..	49	..	..	49	54
Coimbatore, North.	A	1	..	..	..	..	..	1
	B	1	..	68	..	..	68	69
	Total ..	2	..	68	..	..	68	70
Coimbatore, Central.	A	2	..	22	..	..	22	24
	B	7	..	116	1	4	121	128
	Total ..	9	..	138	1	4	143	152
Coimbatore, South.	A	..	..	14	..	..	14	14
	B	..	..	86	..	..	86	86
	C	..	..	1	..	..	1	..
	Total ..	..	..	101	..	..	101	100
Total for unreserved lands.	A	21	2	66	..	8	76	97
	B	40	1	428	1	24	454	494
	C	..	..	5	..	..	5	..
	Total ..	61	3	499	1	32	535	591
Grand total for reserved forests and unreserved lands.	A	188	25	388	112	80	605	793
	B	393	62	1,911	455	214	2,642	3,035
	C	..	331	21	..	..	352	..
	Grand Total ..	581	418	2,320	567	294	3,599	3,828
Total, Presidency.	A	1,668	54	3,969	1,835	404	6,262	7,930
	B	3,570	76	15,532	6,937	1,059	23,604	27,174
	C	..	1,056	577	261	17	1,911	..
Grand total, Presidency ..		5,238	1,180	20,078	9,033	1,480	31,177	35,104

A = Cases taken into Court.
B = Cases compounded by District Forest Officer or Revenue Divisional Officer.
C = Cases undetected.

(*a*) The variations between the closing balance of 1912-13 and these figures are due to transfers between heads A and B.

Rules during 1913-14—*cont.*

Disposed of during the year.						Cases pending at close of the year.
Convictions.		Acquittals.		Total.		
Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
9	10	11	12	13	14	15
CIRCLE—*cont.*						
Lands—cont.						
1	1	..	..	1	1	..
2	2	..	..	* 2	3	
				2	2	1
3	3	..	..	3	3	1
				* 2	3	
6	7	..	..	6	7	1
37	135	..	..	37	135	8
				* 2	2	
..	..	..	..	..	..	..
43	142	..	..	43	142	9
				* 2	2	
..	..	..	..	..	..	1
66	122	..	..	66	122	3
66	122	..	..	66	122	4
23	73	..	..	23	73	1
117	222	..	..	117	222	11
140	295	..	..	140	295	12
14	31	..	..	14	31	..
86	168	..	..	86	168	..
..	..	..	..	..	..	..
100	199	..	..	100	199	..
79	153	7	14	86	167	9
				* 2	3	
432	843	..	..	432	843	49
				* 13	20	
..	..	..	..	..	..	..
511	996	7	14	518	1,010	58
				* 15	23	
589	1,649	54	166	643	1,815	143
				7	12	
2,422	5,461	..	..	2,422	5,461	367
				* 246	676	
..	..	..	..	..	..	..
3,011	7,110	54	166	3,065	7,276	510
				25 3	688	
5,916	15,466	485	1,709	6,401	17,175	1,356
				*173	*459	
21,183	44,152	..	..	21,183	44,152	4,384
				* 1,607	*2,470	
..	..	..	..	..	..	..
27,099	59,618	485	1,709	27,584	61,327	5,740
				* 1,780	*2,929	

* Withdrawn under the orders of the District Forest Officer or Revenue Divisional Officer.

APPENDIX to Annual Form No. 71 (Statement No. II prescribed by the Government of India).

District.	Details of prosecution for offences by fire.						
	Serial number.	Area burnt in acres.	Character of offence (whether intentional or careless).	Whether acquitted or convicted.	Section of law under which convicted.	Amount of punishment.	Remarks.
				Northern Circle.			
Ganjam ..	* 1	10 ..	Intentional.	Convicted ..	Section 21	Fined Rs. 15.	...
	* 2	45 ..	Do.	Do. ..	Do.	Fined Rs. 60.	....
Vizagapatam.	* 1	3 square chains.	Careless ..	Do. ..	Section 21 (*b*) of Forest Act.	Sentenced to undergo 15 days' rigorous imprisonment.	....
Gōdāvari, Upper.	* 1	3,200 ..	Do. ..	Do. ..	Section 21 of Forest Act.	Fined Rs. 15 and further ordered to pay Rs. 15 compensation to Forest department.	....
	2	20 ..	Do. ..	Compounded	Section 26 of Forest Act.	Fined Rs. 15.	....
	3	160 ..	Do. ..	Withdrawn.	....	....	....
	4	*Nil*	Do. ..	Compounded	Section 26 of Forest Act.	Compounded for Rs. 10.	....
Gōdāvari, Lower.	* 1	..	Intentional.	Acquitted ..	Section 21 of Forest Act.	....	....
	2	..	Do.	Convicted ..	Do.	Fined Rs. 5 each.	....
	3	..	Do.	Withdrawn.	Do.	....	....
	4	..	Do.	Pending ..	Do.	....	...
Kistna ..	1	1½ ..	Do.	Do.	Do.	....	....
	2	1,354 ..	Do.	Do.	Do.	....	..
Kurnool, East.	* 1	7 ..	Careless ..	2 accused acquitted and 1 convicted.	Section 21 (*b*) of Forest Act.	Sentenced to pay a fine of Rs. 10 and a compensation of Re. 1 to Forest department.	...
Kurnool, South.	1	*Nil*	Do. ..	Convicted ..	Section 21 (*e*) of Forest Act.	Out of 24 accused Nos. 1 to 12 were found guilty. Accused 1 to 3 and 5 to 12 were sentenced to 15 days' rigorous imprisonment and the 4th accused fined Rs. 10. The rest were acquitted.	....
	2	*Nil*	Do. ..	Pending ..	Section 21 (*b*), (*e*) and (*d*) of Forest Act.	....	....
Kurnool, West.	* 1	100 ..	Intentional.	Convicted ..	Section 21 of Forest Act.	Fined Rs. 50 and in default to 6 weeks' rigorous imprisonment.	....
	2	2 ..	Careless ..	Withdrawn.	....	....	
				Central Circle.			
Bellary ..	* 1	70 acres ..	Intentional.	Acquitted ..	Section 21 (*b*) of the Madras Forest Act V of 1882.	....	....
	2	12 ,, ..	Unintentional.	Withdrawn.	....	Withdrawn as the accused was aged 12 years.	....
	3	2 sq ft. ..	Careless ..	Compounded.	Section 21 (*b*) of the Madras Forest Act V of 1882.	Compounded for Rs. 4.	....
Guntur ..	1	3 sq. yds.	Do. ..	Convicted ..	Do.	Accused was sentenced to undergo simple imprisonment for kindling fire and no damage was done.	...
	2	10 yards ..	Do. ..	Compounded.	Section 21 (*g*) of the Madras Forest Act V of 1882.	Compounded for Rs. 5.	....
Cuddapah, West.	* 1	1,570 acres.	Intentional.	Acquitted ..	245, Criminal Procedure Code.	For want of proper evidence the accused were acquitted.	....
	* 2	580 ,,	Do.	Withdrawn.	....	..	....
	3	110 ,,	Careless ..	Compounded.	Section 21 (*b*) of the Madras Forest Act V of 1882.	.	....
	4	20 cents ..	Do. ..	Convicted ..	Do.	The accused was fined Rs. 30.	....
	5	35 acres ..	Do. ..	Pending ..	Do.	....	....
Cuddapah, East.	* 1	560 ,, ..	Intentional.	Convicted ..	Do.	Sentenced to suffer simple imprisonment for two months.	....
	* 2	800 ,, ..	Do.	Do. ..	Do.	One accused sentenced to suffer simple imprisonment for one month and charge against No. 2 was withdrawn as he was absconding.	....
	* 3	*Nil.*	Do.	Withdrawn.	Do.	Withdrawn as the accused was absconding.	....
	4	76 ..	Do.	Pending ..	....	....	....

* Pending cases of previous year.

Appendix to Annual Form No. 71 (Statement No. II prescribed by the Government of India—*cont.*

District.	Details of punishment for offences by fire.						
	Serial number.	Area burnt in acres.	Character of offence (whether intentional or careless).	Whether acquitted or convicted.	Section of law under which convicted.	Amount of punishment.	Remarks
				Central Circle—cont.			
Cuddapah, East—*cont.*	5	120 ..	Intentional.	Pending ..	Section 21 (*b*) of the Madras Forest Act V of 1882.	Two accused were sentenced to suffer rigorous imprisonment for 15 days and 1 to suffer rigorous imprisonment for one month.	
	6	80 ..	Do.	Convicted ..	Do.	Two accused—rigorous imprisonment for one month each.	
	7	1 ..	Do	Do ..	Do.	One of the accused to suffer rigorous imprisonment for 6 months and the other was acquitted.	
Nellore ..	* 1	1·80 sq. ft.	Careless ..	Acquitted ..	Do.	....	
	2	200 acres.	Intentional.	Pending ..	Do.	....	
	3	45 acres.	Do.	Do. ..	Do.	....	
Chittoor ..	1	395 acres.	Do.	Acquitted—section 245, Criminal Procedure Code.	....	....	
				Southern Circle.			
North Vellore.				*Nil.*			
South Vellore.	4/1912–13.	80	Intentional.	Acquitted ..	....	....	
	5/1912–13.	*Nil.*	Careless ..	Pending ..	....	....	
South Arcot.				*Nil.*			
North Salem.	5/1912–13.	30	Intentional.	Convicted ..	Under section 21 (*b*) of the Forest Act.	Nine accused fined at Rs. 20 each.	
	† 1/1913–14.	6	Do.	Do. ..	Do.	Accused was fined Rs. 30.	
South Salem.	1	8	Do.	First accused acquitted.	Under section 245, Criminal Procedure Code		
				Second accused convicted.	Under section 21 (*b*) of the Forest Act.	To undergo rigorous imprisonment for one month.	
Trichinopoly *cum* Tanjore.	1/1912–13.	25′ × 4′	Careless ..	Convicted ..	Do.	Accused fined Rs. 25.	
	1/1913–14.	Very small.	Do. ..	Acquitted ..			
	2	74 acres.	Do. ..	Do. ..			
	3	15 ,,	Do. ..	Do. ..			
	3/1912–13.	60	Intentional.	Do. ..			
	4/1912–13.	200	Do.	1 Acquitted.			
Madura ..				1 Convicted.	Under section 21 (*b*) of the Madras Forest Act.	Fined Rs. 2.	
	1/1913–14.	30	Do.	Pending ..			
	2	40	Do.	Do. ..			
	3	Not known.	Do.	Do. ..			
Tinnevelly *cum* Ramnad.	1	1,000 acres.	Careless ..	Convicted ..	Under section 21 (*b*) of the Forest Act.	Four accused 6 weeks' rigorous imprisonment.	
	1	80 ,, ..	Intentional.	Do. ..	Do.	Two accused 3 months' rigorous imprisonment.	
				Western Circle.			
South Canara.	* 1	6 ..	Intentional.	Compounded for Rs. 9.	....	....	
	* 2	160 ..	Do.	Convicted ..	Section 21 (*b*) of the Madras Forest Act.	Fined Rs. 90.	
	* 3	100 ..	Do.	Do. ..	Do.	,, Rs. 5.	
	* 4	2,000 ..	Do.	Do. ..	Do.	,, Rs. 300.	
	* 5	75 ..	Do.	Do. ..	Do.	,, Rs. 15.	
	* 6	85 ..	Do.	Do. ..	Do.	,, Rs. 18.	
	* 7	25 ..	Do.	Compounded for Rs. 25.	....	Two accused; first accused sentenced to one month's rigorous imprisonment and the second paid Rs. 25.	
	* 8	1 ..	Careless ..	Compounded for Rs. 2.	....	....	
	* 9	16 ..	Intentional.	Convicted ..	Section 21 (*b*) and (*d*) of the Madras Forest Act.	Fined Rs. 8.	

* Pending cases of previous year.

† Includes three pending cases of last year.

Appendix to Annual Form No. 71 (Statement No. II prescribed by the Government of India)—*cont.*

District.	Details of prosecutions for offences by fire.						
	Serial number.	Area burnt in acres.	Character of offence (whether intentional or careless).	Whether acquitted or convicted.	Section of law under which convicted.	Amount of punishment.	Remarks.
			Western Circle—cont.				
South Canara —*cont.*	* 10	16 ..	Careless ..	Convicted ..	Section 21 (*b*) of the Madras Forest Act.	Fined Rs. 25.	
	* 11	15 ..	Do. ..	Do. ..	Do.	„ Rs. 10.	
	* 12	6 ..	Do. ..	Compounded for Rs. 4.	....	....	
	* 13	8 ..	Do. ..	Compounded for Rs. 2.	....	....	
	14	..	Intentional.	Compounded for Rs. 10.	....	....	
	15	13·2 ..	Careless ..	Compounded for Rs. 2.	....	....	
	16	0·15 ..	Do.	Convicted ..	Section 21 (*c*) of the Madras Forest Act.	Fined Rs. 14.	
	17	87·75 ..	Do. ..	Compounded for As. 8.	....	....	
	18	21 ..	Do. ..	Do.	....	....	
	19	43 ..	Do. ..	Compounded for Rs. 4.	....	....	
	20	8 ..	Do. ..	Compounded for Re. 1.	....	....	
	21	10 ..	Do. ..	Compounded for Rs. 5.	....	....	
	22	3 ..	Do. ..	Compounded for Rs. 15.	....	....	
	23	40 ..	Do. ..	Compounded for Rs. 5.	....	....	
	24	10 ..	Do. ..	Compounded for Rs. 3.	....	....	
	25	3 ..	Do. ..	Compounded for Rs. 6.	....	....	
	26	0·25 ..	Do. ..	Compounded for Re. 1.	....	....	
	27	1	Do. ..	Compounded for As. 4.	....	....	
	28	..	Do. ..	Compounded for Rs. 4-8-0.	....	....	
	29	25 ..	Do. ..	Compounded for Rs. 6.	....	....	
	30	4 ..	Do. ..	Compounded for Rs. 4.	....	....	
	31	4 ..	Do. ..	Compounded for Rs. 5.	....	....	
	32	4 ..	Do. ..	Compounded for Rs. 3.	....	....	
	33	70 ..	Do. ..	Compounded for Rs. 5.	....	....	
	34	10 ..	Do. ..	Compounded for Rs. 2.	....	....	
	35	1·5 ..	Do. ..	Do.	....	....	
	36	12 ..	Intentional.	Compounded for Rs. 3.	....	....	
	37	20	Do.	Do	....	....	
	* 38 to 40	660 ..	Do.	Acquitted ..	....	....	
	* 41	30 ..	Careless ..	Do. ..	....	....	
	† 42 to 58	345 ..	Do. ..	Withdrawn.	....	....	
	59 and 60	36 ..	Intentional.	Do	....	....	
	61 to 66	97·10 ..	Do.	Pending ..	....	....	

* Pending cases of previous year.

† Includes three pending cases of last year.

Annual Form No. 72.

Forest Department, Madras Presidency.

Area of Forest Tracts protected from Fire during 1913–14.

District.	Forest tracts.	Area protected during the previous year.	During the year under report.			Cost during the year under report.	Remarks
			Area attempted to be protected.	Fires.	Actually protected.		
1	2	3	4	5	6	7	8
	Northern Circle.	Acs.	Acs.	Acs.	Acs.	Rs.	
Ganjām ..	Special protection ..	* 105,448	99,557	93	99,464	3,508	* The difference between this figure and that appearing in the report for 1912–13 is due to the adoption of correct areas of blocks.
	General do. ..	34,815	38,538	484	38,054	514	
	Total, Ganjām ..	(a)140,263	(b)138,095	(c) 577	(d)137,518	(e)4,022 + 304	† Adjusted as per Accountant-General's figures.
Vizagapatam.	Special protection ..	64,445	68,010	26	67,984	1,837	
	General do. ..	108,089	124,035	16,819	107,216	214	
	Total, Vizagapatam ..	172,534	192,045	16,845	175,200	2,051 + 11	Adjusted as per Accountant-General's figures.
Gōdāvari, Upper.	Special protection ..	423,631	542,636	162,679	379,957	1,407	
	General do. ..	..	..	..	..	..	
	Total, Gōdāvari, Upper..	423,631	542,636	162,679	379,957	1,407 —1	Adjusted as per Accountant-General's figures.
Gōdāvari, Lower.	Special protection ..	..	..	..	..	..	
	General do. ..	210,129	240,870	12,147	228,723	5,078	
	Total, Gōdāvari, Lower..	210,129	240,870	12,147	228,723	5,078	
Kistna ..	Special protection ..	46,724	60,229	1,665	58,564	1,511	
	General do. ..	..	..	..	..	..	
	Total, Kistna ..	46,724	60,229	1,665	58,564	1,511	
Kurnool, East.	Special protection ..	29,849	100,733	13,920	86,813	(a) 13,986	(a) Of this Rs. 3,566 was spent on cutting fire-lines between grazing and non-grazing areas in other ranges except Gudam.
	General do. ..	507,459	539,569	4,645	534,924	..	
	Total, Kurnool, East ..	537,308	640,302	18,565	621,737	13,986 — 86	Adjusted as per Accountant-General's figures
Kurnool, South.	Special protection ..	168,709	222,391	39,546	182,845	16,842	
	General do. ..	251,038	268,048	3,899	264,149	..	
	Total, Kurnool, South ..	419,747	490,439	43,445	446,994	16,842	
Kurnool, West.	Special protection ..	100,359	155,648	74,283	81,365	9,418	
	General do. ..	340,983	406,655	41,855	364,800	..	
	Total, Kurnool, West ..	441,342	562,303	116,138	446,165	9,418 — 9	Adjusted as per Accountant-General's figures.
	Total, Special protection.	939,165	1,249,204	292,212	956,992	48,509	
	Total, protection ..	1,452,513	1,617,715	79,849	1,537,866	5,806	
	Grand total ..	2,391,678	2,866,919	372,061	2,494,858	54,315 + 219 =54,534	Adjusted as per Accountant-General's figures.
	Central Circle.						
Bellary ..	Special protection ..	62,290	85,364	34,675	50,689	6,191	
	General do. ..	400	2,284	10	2,274		
	Total ..	62,690	87,648	34,685	52,963	6,191	

(a) Excludes 22,059 acres belonging to Parlākimedi Maliahs.
(b) Do. do. do.
(c) Do. 8 do. do.
(d) Do. 22,051 do. do.
(e) Do. Rs. 123 spent on fire protection in Parlākimedi Maliahs.

Area of Forest Tracts protected from Fire during 1913-14—*cont.*

District.	Forest tracts.	Area protected during the previous year.	During the year under report.			Cost during the year under report.	Remarks
			Area attempted to be protected.	Fires.	Actually protected.		
1	2	3	4	5	6	7	8
	Central Circle—cont.	ACS.	ACS.	ACS.	ACS.	RS.	
Anantapur ..	Special protection ..	321,961	405,729	25,918	379,811	6,525	
	General do. ..	..	..	..	..	..	
	Total ..	321,961	405,729	25,918	379,811	6,525	
Guntur ..	Special protection ..	12,075	13,334	250	13,084	89	
	General do. ..	21,102	21,203	263	20,940	310	
	Total ..	33,177	34,537	513	34,024	399	
Cuddapah, West.	Special protection ..	240,393	254,939	16,384	238,555	4,182	
	General do. ..	75,093	87,697	2,623	85,074	621 (*c*) + 57	
	Total ..	315,486	342,636	19,007	323,629	4,860	
Cuddapah, East.	Special protection ..	(*a*)265,842	288,813	15,160	273,653	6,726	
	General do. ..	(*b*)150,890	136,228	12,470	123,758	..	
	Total ..	416,732	425,041	27,630	397,411	6,726	
Nellore ..	Special protection ..	136,272	129,124	426	128,698	1,390	
	General do. ..	..	..	..	..	..	
	Total ..	136,272	129,124	426	128,698	1,390	
Chingleput..	Special protection ..	25,857	25,857	208	25,649	955	
	General do. ..	108,126	108,126	4	108,122	(*c*) — 1	
	Total ..	133,983	133,983	212	133,771	954	
Chittoor ..	Special protection ..	132,940	135,037	3,025	132,012	1,510	
	General do. ..	352,390	356,527	4,867	351,660	(*c*) — 1	
	Total ..	485,330	491,564	7,892	483,672	1,509	
Total..	Special protection ..	1,197,630	1,338,197	96,046	1,242,151	27,568	
	General do. ..	708,001	712,065	20,237	691,328	931 (*c*) + 55	
	Grand Total ..	1,905,631	2,050,262	116,283	1,933,979	28,554	
	Southern Circle.						
Vellore, North.	Special protection ..	97,961	58,060	726	57,334	565	
	General do. ..	207,750	257,653	2,155	255,498	..	
	Total ..	305,711	315,713	2,881	312,832	565	
Vellore, South.	Special protection ..	118,333	144,360	2,815	141,545	1,960	
	General do. ..	317,646	309,275	1,011	308,264	..	
	Total ..	435,979	453,635	3,826	449,809	1,960	
South Arcot.	Special protection ..	13,718	13,541	..	13,541	235	
	General do. ..	207,307	202,026	64	201,962	..	
	Total ..	221,025	215,567	64	215,503	235	
Salem, North	Special protection ..	53,294	67,823	4,100	63,723	3,105	
	General do. ..	481,117	468,841	9,319	459,522		
	Total ..	534,411	536,664	13,419	523,245	3,105	
Salem, South	Special protection ..	228,762	227,436	313	227,123	3,337	
	General do. ..	141,503	155,946	780	155,166	..	
	Total ..	370,265	383,382	1,093	382,289	3,337	
Trichinopoly.	Special protection ..	22,199	22,199	15	22,184	473	
	General do. ..	74,694	81,700	84	81,616	379	
	Total ..	96,893	103,899	99	103,800	852	

(*a*) This includes 54,161 acres of Nallamalais shown under general protection in the last year's return.
(*b*) This excludes 54,161 do. do. but now included under special protection.
(*c*) Added or deducted as per Accountant-General's audited figures.

Area of Forest Tracts protected from Fire during 1913-14—*cont.*

District.	Forest tracts.	Area protected during the previous year.	During the year under report.			Cost during the year under report.	Remarks.
			Area attempted to be protected.	Fires.	Actually protected.		
1	2	3	4	5	6	7	8
	Southern Circle—cont.	ACS.	ACS.	ACS.	ACS.	RS.	
Madura ..	Special protection ..	158,595	206,907	3,668	203,239	4,581	Rs. 689 6 287 78 1,060
	General do. ..	256,697	213,521	1,715	211,806	..	
	Total ..	415,292	420,428	5,383	415,045	4,581*	
Tinnevelly *cum* Ramnad.	Special protection ..	34,104	35,377	4,080	31,297	5,042	
	General do. ..	195,995	206,712	4,633	202,079	..	
	Total ..	230,099	242,089	8,713	233,376	5,042	
	Total, Special protection.	726,966	775,703	15,717	759,986	19,298	
	Total, General protection.	1,882,709	1,895,674	19,761	1,875,913	379	
	Grand total (Special and General).	2,609,675	2,671,377	35,478	2,635,899	19,677	
	Western Circle.						
South Canara.	Special protection ..	127,858	136,513	1,909	134,604	2,703 *+1,060	
	General do. ..	374,223	374,077	4,897	369,180	854	
	Total ..	502,081	510,590	6,806	503,784	4,617	
Malabar, North.	Special protection ..	136,589	139,089	7,655	131,434	7,556	
	General do. ..	..	..	..	..	..	
	Total ..	136,589	139,089	7,655	131,434	7,556	
Malabar, South.	Special protection ..	80,789	82,117	2,673	79,444	2,858	
	General do. ..	..	..	..	..	..	
	Total ..	80,789	82,117	2,673	79,444	2,858	
The Nilgiris.	Special protection ..	72,201	75,851	17,379	58,472	4,097 † — 15	
	General do. ..	..	..	..	..	..	
	Total ..	72,201	75,851	17,379	58,472	4,082	
Kollegal ..	Special protection ..	66,697	67,717	30,032	37,685	2,977 ‡ — 1	
	General do. ..	388,045	399,490	75,925	323,565	..	
	Total ..	454,742	467,207	105,957	361,250	2,976	
Coimbatore, North.	Special protection ..	68,647	70,574	5,725	64,849	3,310 § — 1	
	General do. ..	515,316	519,377	24,541	494,836	..	
	Total ..	583,963	589,951	30,266	559,685	3,309	
Coimbatore, Central.	Special protection ..	102,477	105,122	426	104,696	3,401	
	General do. ..	121,115	120,810	486	120,330	..	
	Total ..	223,592	225,932	906	225,026	3,401	
Coimbatore, South.	Special protection ..	44,959	45,737	3,123	42,614	2,705	
	General do. ..	179,775	182,540	1,540	181,000	.	
	Total ..	224,734	228,277	4,663	223,614	2,705	
	Total, Special protection.	700,217	722,720	68,922	653,798	29,590 +1,060	
	Total, General protection.	1,578,474	1,596,294	107,383	1,488,911	854	
	Grand total, Southern Circle	2,278,691	2,319,014	176,305	2,142,709	31,504	
Total, Special and General protection, presidency.	Special protection ..	3,563,978	4,085,824	472,897	3,612,927	1,27,230	
	General do. ..	5,621,697	5,821,748	227,230	5,594,518	7,039	
	Grand total, Presidency ..	9,185,675	9,907,572	700,127	9,207,445	1,34,269	

* Fire-tracing Mysore-South Canara boundary.
Fire-tracing cart-tracks and cart-stands ..
Cost of reclearing unprotected lengths of boundary lines in Coondapur range ..
Cost of previous years disbursed during the year .. .. Total

† Cash recoveries of service payments.

‡ Deducted as per Accountant-General's audited figures.

§ Deducted as per Accountant-General's audited figures.

ANNUAL FORM No. 73.

Forest Department, Madras Presidency.

AREA closed and open to grazing during 1913-14.

District.	Area in square miles.						
	Closed to all animals.		Closed to both goats and sheep.		Area closed to goats only.	Open to all animals.	Total forest area as per Form No. 65.
	Whole year.	Part of year.	Whole year.	Part of year.		Whole year.	
1	2	3	4	5	6	7	8
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
NORTHERN CIRCLE.							
Ganjām	79	..	(*b*) ..	..	(*c*) 490	(*d*) ..	569
	..	..	..	..	70	..	70
Vizagapatam ..	15	..	2	..	286	..	303
	..	..	..	..	10	..	10
Gōdāvari, Upper ..	2	..	..	..	426	..	428
	..	..	..	..	354	..	354
Do. Lower ..	23	..	262	..	119	..	404
	..	..	..	..	75	..	75
Kistna	59	10	..	..	171	37	277
Kurnool, East	157	..	..	..	843	..	1,000
Do. South	379	..	..	..	387	..	766
Do. West	238	..	..	..	629	..	867
Total ..	952	10	264	..	3,351	37	4,614
	..	..	..	..	509	..	509
CENTRAL CIRCLE.							
Reserved forests.							
Bellary	173	9	..	..	357	88	627
Anantapur	159	..	..	..	584	..	743
Guntūr	72	..	..	..	624	118	814
Cuddapah, West	68	..	..	..	641	25	734
Do. East	208	..	..	..	857	18	1,083
Nellore	56	..	82	..	600	..	738
Chingleput	43	..	..	..	164	2	209
Chittoor	132	29	..	..	675	4	840
Total ..	911	38	82	..	4,502	255	5,788
Reserved lands.							
Bellary	63	..	..	..	..	..	63
Anantapur	..	..	..	..	..	10	10
Guntūr	..	..	..	..	..	..	..
Cuddapah, West	..	..	..	..	..	..	..
Do. East	..	..	..	..	..	..	..
Nellore	..	..	..	..	..	..	..
Chingleput	..	..	..	..	..	..	..
Chittoor	..	..	..	..	..	..	..
Total ..	63	..	..	..	..	10	73
Grand Total ..	974	38	82	..	4,502	265	5,861
SOUTHERN CIRCLE.							
Reserved forests.							
Vellore, North	59	..	..	..	415	15	489
Do. South	53	..	..	..	662	..	715
Arcot, South	26	..	..	..	311	..	337
Salem, North	106	..	..	..	649	37	792
Do. South	52	4	..	..	525	..	581
Trichinopoly	45	..	1	..	309	..	355
Madura	119	..	..	..	509	33	661
Tinnevelly *cum* Rāmnād ..	216	48	2	3	160	..	429
Total ..	676	52	3	3	3,540	85	4,359
Reserved lands.							
Vellore, North	..	..	..	..	(*a*)	..	..
Do. South	..	..	..	..	(*a*)	..	..
Salem, North	..	..	..	..	46	..	46
Do. South	..	..	..	..	18	..	18
Trichinopoly	..	..	..	..	7	..	7
Madura	..	..	..	..	(*a*)	..	..
Total ..	..	..	..	.	71	..	71

* Includes two square miles of Korakavalasa leased forests.

NOTE (*Northern Circle*).—Of the figures in brackets the upper ones denote the area of reserved forests and the lower ones the area of reserved lands.

(*a*) Area omitted being less than a square mile.
(*b*) Excludes 153·9 square miles belonging to Parlakimedi Maliahs.
(*c*) Do. do. do.
(*d*) Do. 63·32 do. do.

Area closed and open to grazing during 1913–14—*cont.*

District.	Area in square miles.						
	Closed to all animals.		Closed to both goats and sheep.		Area closed to goats only.	Open to all animals.	Total forest area as per Form No. 65.
	Whole year.	Part of year.	Whole year.	Part of year.		Whole year.	
1	2	3	4	5	6	7	8
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
WESTERN CIRCLE.							
South Canara	7	..	..	*Reserved forests.* ..	791	..	798
	.	..	..	*Reserved lands.* ..	1	..	1
Total ..	7	..	..	..	792	..	799
Malabar, North ..	30	..	232	*Reserved forests.* ..	..	..	262
	..	..	*	*Reserved lands.* .	..	..	*
Total ..	30	..	232	.	..	..	262
Malabar, South ..	108	..	..	*Reserved forests.* ..	..	..	108
	55	..	..	*Reserved lands.* ..	..	..	55
Total ..	163	..	..	..	..	..	163
The Nilgiris	23	..	..	*Reserved forests.* ..	452	..	475
	4	..	..	*Reserved lands.* ..	78	..	82
Total ..	27	..	..	..	530	..	557
Kollégal	163	..	..	*Reserved forests.* ..	567	..	730
	..	..	..	*Reserved lands.* ..	1	..	1
Total ..	163	..	..	..	568	..	731
Coimbatore, North ..	13	..	..	*Reserved forests.* ..	909	..	922
	..	..	..	*Reserved lands.* ..	*	..	*
Total ..	13	..	..	..	909	..	922
Coimbatore, Central ..	139	4	..	*Reserved forests.* ..	210	..	353
	10	..	..	*Reserved lands.* ..	..	..	10
Total ..	149	4	..	..	210	..	363
Coimbatore, South ..	88	..	179	*Reserved forests.* ..	187	..	454
	*	..	..	*Reserved lands.* ..	*	..	*
Total ..	88	..	179	..	187	..	454
Total, Western Circle ..	571	4	411	*Reserved forests.* ..	3,116	..	4,102
	69	..	..	*Reserved lands.* ..	80	..	149
Grand total ..	640	4	411	..	3,196	..	4,251
Grand total, Presidency.	3,110	104	760	3	14,509	377	18,863
	132	..	..	..	660	10	802

* Less than one square mile.

NOTE.—The upper set of figures in columns 2 to 8 under Grand Total, Presidency, represent the area of reserved forests, and the lower, the area of reserved lands.

ANNUAL.

Forest Department,

RETURN of Grazing in the

Districts.	Grazing on payment. Number									
	At enhanced or special rates.					At full rates.				
	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.
1	2	3	4	5	6	7	8	9	10	11
NORTHERN CIRCLE.					RS.					RS.
Ganjam	(*d*) & (*g*) 163	(*d*) & (*r*) 765	..	..	(*s*) 409	11,048	37,454	S 326	Fodder grass.	11,260
Vizagapatam ..	(*a*) 194	(*a*) 3,003	(*a*) S 3,261	..	1,255	1,599	19,342	S 4,190	..	4,619
Gōdāvari, Upper..	..	..	..	..	..	..	..	..	..	..
Do. Lower	(*a*) 8,212	(*a*) 8,807	..	..	7,540	1,312	10,916	S 250	..	1,716
	(*d*) 1,279	(*d*) 730	..	..					Fodder grass.	157
									..	8,344
									Fooder grass.	626
Kistna	(*d*) 440	(*d*) 5,773	(*a*) S 2,390	..	7,322	6,287	22,584	S 18,693	Amount collected from grazing on panchayat system.	1,620
		(*g*) 2,491	G 5,751	..						
Kurnool, East ..	(*a*) 6,835	(*a*) 84,180	(*a*) S 36,632	..	29,042	1,392	6,479	S 22,519	..	3,848
									Fodder grass.	42
									..	6,021
Do. South ..	(*a*) 636	(*a*) 6,488	(*a*) S 6,870	..	2,799	2,529	15,969	S 22,173	Balance of revenue on lodge permits being arrears of revenue.	35
									Fodder grass.	1,143
Do. West ..	(*a*) 4,944	(*a*) 28,706	(*a*) S 11,801	Fodder grass 49 C.L.	11,139	4,034	34,619	S 51,613	..	12,843
Total ..	22,703	140,943	S 60,954 G 5,751	Fodder grass 49 C.L.	59,506	28,201	147,363	S119,764	Fodder grass.	52,274
Reserved lands—										
Gōdāvari, Upper..	(*b*) 352	(*b*) 2,191	..	..	861	..	..	..	..	..
Do. Lower..	(*a*) 3,478	(*a*) 3,903	..	..	2,715	..	..	..	..	..
Kistna	..	..	..	..	..	214	124	..	..	104
Total ..	3,830	6,094	..	..	3,576	214	124	..	..	104
Grand Total ..	26,533	147,037	S 60,954 G 5,751	Fodder grass 49 C.L.	63,082	28,415	147,487	S 119,764	Fodder grass.	52,378
CENTRAL CIRCLE.										
Bellary	..	..	..	..	..	15,535	75,951	G 57,732	..	41,136
	..	..	..	..	..	..	..	S 167,008	..	
Anantapur ..	..	..	..	..	..	4,243	70,988	S 152.334	Fodder grass.	
	(*i*) ..	..	..	..	..	109	3,435	S 17,131	T. lbs. 79 680	30,368
Guntūr	(*j*) 1,536	54,265	G 12,564	..	35,810	18,141	27,109	G 52,330	..	26,171
	..	..	S 63,767	..		..	..	S 100,045	..	
	(*k*) ..	6,478	..	..	6,478	..	..	..	..	..
	(*l*) 790	1,930	G 4,233	..	2,584	..	..	..	..	..
	..	..	S 8,885	..		..	..	..	..	..
Cuddapah, West.	..	..	..	..	..	1,147	33,831	G 2,161	..	16,617
	..	..	..	..	..	..	..	S 81,947	..	
	..	..	..	..	..	..	Penning fees.		..	47
Do. East..	..	..	..	..	..	2,551	43,396	G 3,727	..	17,372
	..	..	..	..	..	..	..	S 68,432	..	
Nellore	(*p*) ..	..	..	..	..	6,997	65,574	S 111,281	..	32,927
	..	..	..	..	..	..	Kancha rent.			16,106
	..	..	..	..	..	..	Lease of grass.			36
Chingleput ..	..	..	..	..	..	2,470	33,630	S 72,445	..	14,069
	..	..	..	..	..	..	..	G 181	..	
	..	..	..	..	..	..	Penning fees.		..	11
Chittoor ..	..	..	..	..	..	2,803	79,479	G 570	..	21,849
	..	..	..	..	..	..	..	S 58,325	..	
	..	..	..	..	..	..	Penning fees.		..	55
Total ..	2,326	62,663	G 16,797 S 72,652	..	44,872	53,996	433,393	G 116,701 S 828,948	..	2,16,764

G. = Goats. S. = Sheep.

(*a*) The enhanced rates are 8 annas per buffalo, 4 annas per cow or bullock and 2 annas per sheep.

(*b*) The enhanced rates in the Nugur taluk are 8 annas per buffalo and 5 annas per cow or bullock for alien cattle.

(*c*) The privileged rates in the Bhadrāchalam taluk are 2 annas per buffalo, 1 anna per cow or bullock and 6 pies per sheep.

(*d*) The enhanced rates are 12 annas per buffalo, 6 annas per cow or bullock and 3 annas per sheep or goat. The full rates in Gōdāvari, Lower, are 4 annas per buffalo, 2 annas per cow or bullock and 1 anna 6 pies per sheep.

(*e*) The privileged rate is 1 anna per cow or buffalo.

(*g*) The enhanced rates are Re. 1 per bullock or cow or buffalo and 4 annas per goat.

(*h*) The privileged rates in the Nugur taluk are 4 annas per buffalo, 2 annas per cow or bull, 1 anna per sheep, 2 annas per horse and 1 anna 3 pies per goat.

Central Circle.—The full rates are As. 6 per buffalo, As. 3 per cow and As. 1-6 per sheep. As. 1-6 per goat in Bellary. Re. 1 per goat in West Cuddapah. As. 8 per goat in East Cuddapah. As. 12 per goat in Chittoor. As. 4 per goat in Chingleput, Nellore and Bapatla range in Guntūr district.

Form No. 74.

Madras Presidency.

State forests during 1913–14.

of animals.							Grazing free. Number of animals.											Grand total of value at full rates.
At privileged rates.							By right under settlement.					During pleasure of Government or otherwise than under settlement.						
Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received. Actual.	Fees received. Value at full rates.		Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Total value of fees at full rates.	
12	13	14	15	16	17		18	19	20	21	22	23	24	25	26	27	28	29
				Rs.	Rs.						Rs.					Rs.	Rs.	Rs.
..	..	..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	11,669
..	..	..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	5,874
(o) 5,262	(o)23,418	(o) S 9,235	..	2,410	7,230		..	..	..	..	..	3,915	42,680	S 400	..	9,508	9,508	16,738
(o)736	(o)14,812	..	..	972	2,035		..	..	..	..	..	..	160	..	..	20	20	11,468
..	..	..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	17,912
..	..	..	..	..	..		157	235	G 762 S 1,140	..	281	..	..	..	..	..	..	33,213
..	..	..	..	..	..		2	26	S 66	..	12	..	..	..	..	..	..	10,010
..	..	..	..	..	..		..	1,491	S 3,303	..	589	..	..	..	..	..	..	24,571
5,998	38,230	S 9,235	..	3,382	9,265		159	1,752	G 762 S 4,509	..	882	3,915	42,840	S 400	..	9,528	9,528	1,31,455
(h) 5,406	(h)28,785	(h)S2,121 (h)G3,496	6	5,356	7,952		..	..	..	..	..	6	3,448	..	..	649	649	9,462
..	..	..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	2,715
..	..	..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	104
5,406	28,785	S. 2,121 G. 3,496	6	5,356	7,952		..	..	..	..	..	6	3,448	..	..	649	649	12,281
11,404	67,015	S. 11,356 G. 3,496	6	8,738	17,217		159	1,752	G 762 S 4,509	..	882	3,921	46,288	S 400	..	10,177	10,177	1,43,736
..	..	..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	41,136
..	..	..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	30,368
..	..	..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	
..	..	..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	71,043
..	..	..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	
..	..	..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	
(m) ..	90	S. 200	..	18	36		..	..	..	..	..	..	..	..	..	..	..	16,700
..	..	..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	
(m) ..	80	S. 350	..	39	94		..	800	..	..	150	..	..	..	..	..	..	17,616
(n) ..	72	S. 350	..															
..	246	S. 658	..	108	144		..	..	..	..	..	..	5,251	..	..	1,313	1,313	50,526
..	..	..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	
..	..	..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	
..	..	..	..	(o) 400	400		..	..	..	..	..	..	81	..	..	..	15	14,495
..	..	..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	
..	..	..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	21,904
..	..	..	..				..	..	..	..	..	..	..	..	..	..	..	
..	488	(S) 1,558	..	565	674		..	800	..	..	150	..	5,332	..	..	1,313	1,328	2,63,738

C.L. = Cart-loads at 5 annas per cart-load.

(*i*) Half the full rates for half year.
(*j*) At As. 12 per buffalo, As. 6 per cow, As. 3 per sheep and goat.
(*k*) Plough bullocks at Re. 1.
(*l*) At As. 8 per buffalo, As. 4 per cow, As. 2 per sheep and goat.
(*m*) At As. 1–6 per cow and 9 pies per sheep.
(*n*) At anna 1 per cow and 6 pies per sheep.
(*o*) Composition fees sanctioned in G.O. No. 1120, Revenue, dated 17th April 1912.
(*p*) At As. 6 per buffalo, As. 4 per cow, and As. 2 per sheep.
(*q*) Four hundred and sixty-five buffaloes belonging to the Parlakimedi Maliahs.
(*r*) One thousand two hundred and forty-three cows belonging to the Parlakimedi Maliahs.
(*s*) Excludes Rs. 407 realised in Parlakimedi Maliahs.

Return of Grazing in the

District.	Grazing on payment. Number									
	At enhanced or special rates.					At full rates.				
	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.
1	2	3	4	5	6	7	8	9	10	11
SOUTHERN CIRCLE.					Rs.					Rs.
Vellore, North	..	..	G. 4,356	..	3,267	2,259	69,370	S. 89,331	..	22,229 (a) 306 (i)— 234
Do. South	..	22,464	..	..	5,616	1,863	83,269	S. 51,887	..	21,176 (b) 44 (f) 4
Arcot, South	..	143	..	..	36	5,050	72,342	S. 159,813	..	30,440 (i)— 212
Salem, North	1,171	74,492	G. 7,118 S. 20,191	..	25,291	124	30,957	S. 25,106	..	8,205 (b) 481 (a) 11 (i) + 3
Do. South	..	..	..	..	..	1,269	95,011	S. 34,447	..	21,520
Trichinopoly	..	..	G. 200	..	50	3,301	49,393	S. 185,337	16	27,878
Madura	444	63,640	G. 17,138 S. 37,132	296	29,417	..	..	..	..	..
Tinnevelly	..	..	..	..	..	593	21,305	S. 33,703	..	7,377 (g) 222 (b) 15
Total ..	1,615	160,739	G. 28,812. S. 57,323	296	63,677	14,459	421,647	S. 579,624	16	1,39,465
WESTERN CIRCLE.										
Reserved Forests.										
South Canara	..	..	..	..	..	5,532	38,895	..	..	9,367
Malabar, North	..	..	..	..		3,527	6,772	..	..	2,592
Do. South	..	..	..	..	..	..	..	..	..	(a) 3
The Nilgiris	..	(j) 1,161 (k) 62	..	..	596	10,300	21,811	1,353	..	8,079 (a) 195 (p) + 1
Kollegal *	2,640	72,032	7,776	..	20,300 (l) 15	..	..	..	..	..
Coimbatore, North * ..	5,642	79,961	31,463	..	26,744 (a) 639	..	..	..	..	..
Do. Central ..	..	..	..	..	..	266	22,880	14,794	..	5,777 (a) 1,077 (m) 260
Do. South ..	..	..	..	..	..	418	12,087	165	..	2,439 (a) 241 (p) — 1
Total ..	8,282	153,216	39,239	..	48,294	20,043	102,445	16,312	..	30,030
Reserved Lands.										
The Nilgiris	..	(j) 378	..	..	189	693	706	..	..	392
Grand Total, Presidency.	38,756	524,033	S. 230,168 G. 51,360	296	2,20,114	117,606	1 105,678	S. 1,544,648 G. 116,701	16	4,39,029

G. = Goats. S. = Sheep.

* Annas 8 per buffalo, As. 4 per cow, bullock or other animals and As. 2 per sheep.

Southern Circle.—The enhanced or special rates are buffalo As. 8, cow As. 4, sheep As. 2, other animal As. 4, goats As. 12 in North Vellore, As. 8 in North Salem and Madura and As. 4 in Trichinopoly.

The full rates are As. 6 per buffalo, As. 3 per cow, bullock or other animal, and As. 1-6 per sheep.

The privileged rates are half the full rates.

(a) Sale-proceed of fodder grass.
(b) Penning license fee.
(c) 2,445 buffalos at As. 3 each, 24 at As. 4-6 each and 13 at As. 1-6 each.
(d) 13,895 cows at As. 1-6 each, 215 at As. 2-3 each and 34 at 9 pies each.
(e) 430 sheep at 9 pies each.
(f) Fees levied as penalty for permits lost.
(g) Lease amount for grazing in Kavalkutti Parambu reserved forest.
(h) Free removal of grass.

Western Circle.—The full rates are As. 6 per buffalo, As. 3 per cow, bullock or other animals and As. 2 per sheep.

(i) Added or subtracted as per Accountant-General's audited figures.
(j) Annas 8 per cow or bullock.
(k) Calves, half-rate.
(l) Excess remittance.
(m) Revenue from reserves handed over to Panchayat.
(o) Buffaloes, cows, etc., brought for a cattle fair charged without distinction at a uniform rate of annas 2 per head.
(p) Variations as per Accountant-General's audited figures.

State forests during 1913-14—*cont.*

of animals.						Grazing free. Number of animals.										Grand total of value at full rates.
At privileged rates.						By right under settlement.					During pleasure of Government or otherwise than under settlement.					
Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received. Actual.	Fees received. Value at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Total value of fees at full rates.	
12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
				Rs.	Rs.										Rs.	Rs.	Rs.
68	817	S. 22	..	90	180	..	..	..	..	..	..	..	..	..	(*h*) 2,961	2,961	28,709
(*c*) 2,482	(*d*) 14,144	(*e*)S.430	..	1,821	3,623	..	..	..	..	..	354	1,780	S. 24	..	469	469	30,932
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	(*h*) 72	72	30,336
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	33,991
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	21,520
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	27,928
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	29,417
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7,614
2,550	14,961	S. 452	..	1,911	3,803	..	..	.	..	..	354	1,780	S. 24	..	3,502	3,502	2,10,447
..	..	..	(*o*) 17,249	2,156	(*o*)2,156	..	..	..	..	..	..	..	..	..	..	..	11,523
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2,592
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
..	..	(*n*) 14,918	..	62	1,398	..	..	..	..	..	2,232	..	..	..	837	837	11,106
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	20,315
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	27,383
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7,114
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2,679
..	..	14,918	17,249	2,218	3,554	..	..	..	..	..	2,232	..	..	..	837	837	82,715
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	581
13,954	82,464	S. 28,279 G. 3,496	17,255	13,432	25,248	159	2,552	S.4,509 G. 762	..	1,032	6,507	53,400	424	..	15,829	15,844	7,01,267

Abstract of animals licensed to graze on payment.

Circles.	Buffaloes.	Bullocks and cows.	Sheep.	Goats.	Other animals.	Total.
Northern Circle	66,352	361,539	192,074	9,247	6	629,218
Central Circle	56,322	496,544	903,158	133,498	..	1,589,522
Southern Circle	18,624	597,347	637,399	28,812	312	1,282,494
Western Circle	29,018	256,745	70,464	..	(*a*)17,249	373,476
Grand Total, Presidency ..	170,316	1,712,175	1,803,095	171,557	17,567	3,874,710

(*a*) Number of buffaloes and cows, etc., brought for a cattle fair and charged without distinction at a uniform rate of As. 2 per head.

ANNUAL FORM No. 75.

Forest Department, Madras Presidency.

AREA of plantations and topes, 1913–14.

District.	Area in acres.				Expenditure during the year.		Total expenditure from commencement.		Revenue during the year.	Total revenue from date of creation of plantation.
	On 1st July 1913.	Added during the year.	Excluded during the year.	Area on 30th June 1914.	Creation.	Upkeep.	Creation.	Upkeep.		
1	2	3	4	5	6	7	8	9	10	11
A.—Regular Plantations.										
NORTHERN CIRCLE.					RS.	RS.	RS.	RS.	RS.	RS.
Ganjām	(a) 412	(b)..	..	(c) 412	..	(d) 78	28,199	(e) 12,864	4,444	17,816
Vizagapatam	78	..	..	78	..	..	..	5	505	2,590
Gōdāvari, Lower	949	..	74	875	1,861	1,160	50,048	22,475	8,594	90,564
Kistna	1,055	..	138	917	..	992	19,540	58,562	5,035	67,033
Kurnool, East	130	..	..	130	..	2,593	38,471	25,034	..	..
Do. South	* 98	..	20	78	..	330	1,500	* 3,040	..	..
Do. West	1,105	150	..	1,255	18,166	6,128	2,54,442	33,050	833	9,340
Total ..	3,827	150	232	3,745	20,027	11,281	3,92,200	1,55,030	19,411	1,87,343
B.—Taungya Plantations—Nil.										
C.—Cultural Operations.										
Ganjām	399	20	..	419	35	334	2,268	503	..	..
Vizagapatam	44	..	..	44	17	10	369	93	..	..
Gōdāvari, Upper	* 829	..	..	*829	..	..	2,225	830	..	145
Do. Lower	2,402	..	..	2,402	..	..	2,358	1,032	..	..
Kistna	3,002	728	4	3,726	1,260	794	8,338	3,579	5,501	36,440
Kurnool, East	33	..	..	33	235	227	9,919	3,561	..	..
Do. South	174	126	..	300	1,257	79	7,015	779	..	..
Do. West	* 2,198	* 220	..	2,418	* 5,402	* 118	* 21,274	* 118	..	..
Total, Northern Circle ..	9,081	1,094	4	10,171	8,206	1,562	53,766	10,495	5,501	36,585
A.—Regular Plantations.										
CENTRAL CIRCLE.										
Bellary	529	50	..	579	605	1,140	9,423	62,147	..	14
Anantapur	..	..	..	..	..	..	..	..	..	..
Guntūr	3,269	..	206	3,063	..	3,672	51,814	31,163	2,043	29,233
Cuddapah, West	10	..	..	10	..	..	560	..	..	..
Do. East	8	..	..	8	..	96	..	184	132	193
Nellore	5,291	..	..	5,291	..	9,440	1,56,705	11,220	49,997	4,97,774
Chingleput	356	..	..	356	645	625	8,103	5,501	621	10,695
Chittoor	..	..	..	..	..	..	..	..	..	..
Total ..	9,463	50	206	9,307	1,250	14,973	2,26,605	1,10,215	52,793	5,37,909
B.—Taungya Plantation—Nil.										
C.—Cultural Operations.										
Bellary	20,611	79	..	20,690	756	3,491	84,252	10,717	..	..
Anantapur	70,977	..	..	70,977	..	330	39,644	593	..	274
Guntūr	183	..	..	183	..	..	348	..	..	..
Cuddapah, West	1,713	..	..	1,713	..	..	855	136	560	2,540
Do. East	1,791	..	..	1,791	..	450	492	1,554	28	28
Nellore	462	..	..	462	..	..	2,276	5	..	..
Chingleput	11,888	2,695	..	14,583	36	109	2,715	4,399	..	..
Chittoor	208	62	40	230	396	..	396	860	52	101
Total, Central Circle ..	107,833	2,836	40	110,629	1,188	4,380	1,30,978	18,264	640	2,948
A.—Regular Plantations.										
SOUTHERN CIRCLE.										
North Vellore	1,260	7	..	1,267	296	1,939	17,082	1,31,152	6,431	70,517
South do	..	..	..	..	..	..	..	..	..	..
South Arcot	1,366	..	1,296	70	..	604	40,817	8,560	80,285	3,06,276
North Salem	..	..	..	..	..	..	..	..	..	..
South do	552	1	..	553	44	..	32,017 (f) 1,416	8,715	933	9,694 + (f) 88
Trichinopoly *cum* Tanjore	724	..	578	146	..	766	34,561	9,828	5,180	33,576
Madura	592	80	..	672	5,498	1,244	35,676	5,907	322	2,158
Tinnevelly *cum* Rāmnād	1,768	30	..	1,798	116	1,015	3,438	6,300	..	..
Total ..	6,262	118	1,874	4,606	5,954	5,568	1,65,007	1,70,462	93,151	4,22,309

* NOTE (*Central Circle*).—Correct figures furnished by the Collector.

The upkeep includes cleaning, weeding, thinning, filling up blanks, etc.

(*a*) Excludes 4 acres belonging to Parlākimedi Maliahs.
(*b*) Do. 2 do.
(*c*) Do. 6 do.
(*d*) Do. Rs. 72 spent in Parlākimedi Maliahs.
(*e*) Do. .. 94 do.
(*f*) On account of transfer of one acre under "C" from North Salem to "A" in South Salem.

Area of plantations and topes, 1913-14—*cont.*

District.	Area in acres.				Expenditure during the year.		Total expenditure from commencement.		Revenue during the year.	Total revenue from date of creation of plantation.
	On 1st July 1913.	Added during the year.	Excluded during the year.	Area on 30th June 1914.	Creation.	Upkeep.	Creation.	Upkeep.		
1	2	3	4	5	6	7	8	9	10	11
				B.—Taungya Plantations.						
SOUTHERN CIRCLE—*cont.*					RS.	RS.	RS.	RS.	RS.	RS.
North Vellore	818	..	..	818	..	146	77	266	30	96
South do	237	..	97	140	..	..	..	..	157	2,272
South Arcot	..	..	..	..	..	..	..	..	..	..
North Salem	..	..	..	..	..	..	..	..	..	..
South do	..	..	..	..	..	..	..	..	..	..
Trichinopoly *cum* Tanjore	..	..	..	..	..	..	..	..	..	..
Madura	..	..	..	..	..	..	..	..	..	..
Tinnevelly *cum* Rāmnād	1	..	..	1	..	7	7	11	..	..
Total	1,056	..	97	959	..	153	84	277	187	2,368
				C.—Cultural Operations.						
North Vellore	835	5	..	840	..	9	20	9	..	578
South do	572	249	..	821	114	61	267	110	..	..
South Arcot	4,558	611	..	5,169	214	..	2,779	487	..	..
North Salem	585	..	8	577	635	..	6,410	30,293 —(*a*)1,416	618	7,675 —(*b*) 108
South do	656	160	..	816	269	117	1,966	1,135	8	152
Trichinopoly *cum* Tanjore	..	..	..	..	..	..	..	..	..	..
Madura	24	3	14	13	107	..	262	48	70	182
Tinnevelly *cum* Rāmnād	3,033	423	..	3,456	346	78	4,713	180	..	..
Total	10,263	1,451	22	11,692	1,685	265	16,417	30,846	696	(*c*) 8,479
				A.—Regular Plantations.						
WESTERN CIRCLE.										
South Canara	124	..	..	124	..	..	2,462	7,067	..	18,152
Malabar, North	870	1	..	871	76	387	15,240	17,905	740	940
Do. South	6,473	..	..	6,473	..	4,592	5,37,942	5,26,762	77,174	17,63,004
The Nilgiris	1,766	..	..	1,766	58	1,977	6,462	2,82,274	32,108	5,46,803
Coimbatore, Central	559	36	..	595	60	3	532	255	..	..
Do South	157	.	..	157	..	770	9,947	3,224	..	..
Total	9,949	37	..	9,986	194	7,729	5,72,585	8,37,487	1,10,022	23,28,899
				B.—Taungya Plantation.						
South Canara	547 (*d*)+646	..	..	1,193	..	52	46	52	..	..
Malabar, North	753	..	.	753	..	.	..	10,728	195	4,978
Total	1,946	..	..	1,946	..	52	46	10,780	195	4,978
				C.—Cultural Operations.						
South Canara	..	..	..	..	..	(*e*) 6	..	191	..	..
Malabar, North	1,811	1,166	..	2,977	832	601	1,370	7,118	..	..
Do. South	214	1	..	215	123	72	2,291	1,320	..	..
The Nilgiris	505 (*d*)—408	..	..	97	..	212	367	29,514	..	..
Kollegal	6,570	100	..	6,670	102	..	432	149	..	..
Coimbatore, North	25,612	1,636	..	27,248	198	.	573	..	..	159
Do. Central	532	236	..	768	496	149	1,591	343	..	37
Do. South	699	482	..	1,181	156	4	2,187	1,100	..	..
Total	35,535	3,621	..	39,156	1,907	1,044	8,811	39,735	..	196
Grand Total, Western Circle	47,430	3,658	..	51,088	2,101	8,825	5,81,442	8,88,002	1,10,217	23,34,073
Total. Regular plantation	29,501	355	2,312	27,544	27,425	39,551	13,56,397	12,73,194	2,75,377	34,76,460
Total. Cultural operations	1,62,712	9,002	66	171,648	12,986	7,251	2,09,972	99,340	6,837	48,691
Total. Taungya plantation	3,002	..	97	2,905	.	205	130	11,057	382	7,346
Grand Total, Presidency	1,95,215	9,357	2,475	2,02,097	40,411	47,007	15,66,499	13,85,591	2,82,596	35,32,497

(*a*) On account of transfer of one acre under "C" from North Salem to "A" in South Salem.
(*b*) Rs. 88 transferred to South Salem "A" and Rs. 20 omitted on account of area transferred to Revenue department.
(*c*) Corrected in the Board's office.
(*d*) Added or deducted as per correct area now reported.
(*e*) Cost incurred in sowing seeds in reserved forests.

ANNUAL

Forest Department,

OUTTURN (in cubic feet solid) of Timber, Fuel and Bamboos

District.	Timber.					Fuel.				
	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.
1	2	3	4	5	6	7	8	9	10	11
NORTHERN CIRCLE.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.
Ganjām.										
Reserved forests—										
Sāl	15,172	117,535	..	..	132,707	..	..	..	..	..
Miscellaneous	1,263	2,110	29,820	..	33,193	..	..	..	..	..
Total ..	16,435	119,645	29,820	..	165,900	26,257	319,572	..	637,908	983,737
Reserved lands	..	..	..	..	..	..	..	..	..	..
Unreserved lands—										
Sāl	11,187	50,987	..	..	62,174	..	..	..	..	..
Miscellaneous	14,728	809,361	9,960	188,700	1,022,749	..	..	..	..	..
Total ..	25,915	860,348	9,960	188,700	1,084,923	320	269,307	..	..	269,627
Total, Ganjām ..	(*a*)42,350	(*b*)979,993	(*c*) 39,780	188,700	(*d*)1,250,823	26,577	(*e*)588,879	..	637,908	1,253,364
Vizagapatam.										
Reserved forests—										
Miscellaneous	145	1,271	79	..	1,495	175,224	21,124	..	..	196,348
Unreserved lands—										
Yegisi	8	560	..	..	568	..	..	..	..	..
Maddi	..	3,920	..	..	3,920	..	..	..	..	..
Miscellaneous	585	76,106	..	..	76,691	..	..	..	..	..
Total ..	593	80,586	..	..	81,179	..	38,486	..	..	38,486
Total, Vizagapatam ..	738	81,857	79	..	82,674	175,224	59,610	..	..	234,834
Gōdāvari, Upper.										
Reserved forests—										
Teak	282	1,757	..	..	2,039	..	..	..	..	..
Maddi	1,266	..	..	..	1,266	..	..	..	..	..
Miscellaneous ..	913	..	1,037	..	1,950	..	..	..	..	..
Total ..	2,461	1,757	1,037	..	5,255	..	..	..	..	..
Reserved lands—										
Teak	3,171	576	1,460	..	5,207	..	..			..
Miscellaneous	86	320	531	..	937	..	..	..	..	..
Total ..	3,257	896	1,991	..	6,144	..	240	..	..	240
Unreserved lands—										
Teak	957	16,851	734	..	18,542	..	..	..	..	..
Maddi	246	13,693	..	..	13,939	..	..	..	..	..
Yegisi	..	2,596	..	..	2,596	..	..	..	..	..
Yepi	..	1,112	..	..	1,112	..	..	..	..	..
Miscellaneous	485	35,128	88	..	35,791	..	..	..	..	..
Total ..	1,688	69,380	822	..	71,890	648	146,155	..	..	146,803
Total, Gōdāvari, Upper ..	7,406	72,033	3,850	..	83,289	648	146,395	..	..	147,043
Gōdāvari, Lower.										
Reserved forests—										
Teak	2,021	2,767	..	..	4,788	..	..	..	..	..
Maddi	258	231	..	..	489	..	..	..	..	..
Yegisi	414	292	..	..	706	..	..	..	..	..
Miscellaneous	2,505	12,918	..	..	15,423	..	..	..	..	..
Total ..	5,198	16,208	..	..	21,406	38,627	435,321	..	..	473,948
Unreserved lands—										
Teak	..	157	..	..	157	..	..	..	..	..
Maddi	2	33,614	..	..	33,616	..	..	..	..	..
Yegisi	18	25,427	..	..	25,445	..	..	..	..	..
Miscellaneous	1,343	267,997	..	..	269,340	..	..	..	..	..
Total ..	1,363	327,195	..	..	328,558	..	201,144	..	..	201,144
Total, Gōdāvari, Lower ..	6,561	343,403	..	..	349,964	38,627	636,465	..	..	675,092

(*a*) Excludes 200 c.ft. belonging to Parlakimedi Maliahs.
(*b*) Do. 53,000 do. do.
(*c*) Do. 1,680 do. do.
(*d*) Do. 54,880 do. do.
(*e*) Do. 61,260 do. do.

FORM No. 76.

Madras Presidency.

(in number) during the year 1913–14, and Agency of Exploitation.

Total.	Bamboos.									
	Government.		Purchasers.		Free-grantees.		Right-holders.		Total.	
Outturn.	Number.	Value in Rs	Number.	Value in Rs.	Number.	Value in Rs.	Number.	Value in Rs.	Number.	Value in Rs
12	13		14		15		16		17	
C. FT										
..	..	..	..	.	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
1,149,637	122,898	1,114	399,489	2,108	31,830	227	..	..	554,217	3,449
..	..	..	14,000	85	..	..	..	..	14,000	85
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
1,354,550	150	1	200,450	2,081	1,600	12	68,640	268	270,840	2,362
(*f*)2,504,187	(*g*) 123,048	1,115	(*h*) 613,939	4,274	(*i*) 33,430	239	68,640	268	(*j*) 839,057	5,896
197,843	42,615	970	984,942	8,104	2,100	38	..	..	1,029,657	9,112
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
119,665	364	3	77,068	815	..	..	..	..	77,432	818
317,508	42,979	973	1,062,010	8,919	2,100	38	..	..	1,107,089	9,930
..	..	..	..	..	..	..	.	..	..	..
..	..	..	..	..	..	..	..	..	..	..
.	..	..	..	..	..	..	..	..	..	..
5,255	8,850	44	575,575	6,283	550	3	..	..	584,975	6,330
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
6,384	300	3	24,250	242	..	..	..	..	24,550	245
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..		..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	.	..	..	..	..	..	..	..
218,693	..	..	300,000	1,500	5	..	..	..	300,005	1,500
230,332	9,150	47	899,825	8,025	555	3	..	..	909,530	8,075
.	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..		..		..	..	..	..	..
495,354	10,395	52	650,854	3,254	..	..	..	..	661,249	3,306
..	..	..	..	..	..	..	..	..	..	..
..	..	..		..	..	.	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
529,702	11,400	57	1,942,711	9,714	..	..	..	..	1,954,111	9,771
1,025,056	21,795	109	2,593,565	12,968	..	..	..	..	2,615,360	13,077

(*f*) Excludes 116,140 c.ft. belonging to Parlakimedi Maliahs.
(*g*) Do. 46,948 bamboos. do.
(*h*) Do. 33,180 do. do.
(*i*) Do. 7,040 do. do.
(*j*) Do. 87,168 do. do.

Outturn (in cubic feet solid) of Timber, Fuel and Bamboos

District.	Timber.					Fuel.				
	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.
1	2	3	4	5	6	7	8	9	10	11
NORTHERN CIRCLE—*cont.*	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.
Kistna.										
Reserved forests—										
Miscellaneous	165	63,222	..	..	63,387	16,524	2,117,034	..	..	2,133,558
Unreserved lands—										
Miscellaneous	..	157,057	60	..	157,117	..	52,923	..	..	52,923
Total, Kistna ..	165	220,279	60	..	220,504	16,524	2,169,957	..	..	2,186,481
Kurnool, East.										
Reserved forests—										
Teak	1,160	..	..	..	1,160	..	..	..	..	..
Yegisi	1,926	11,248	..	..	13,174	..	..	..	..	..
Yepi	216	47	..	..	263	..	..	..	..	..
Miscellaneous	24,982	1,191	112	..	26,285	..	..	..	..	..
Total ..	28,284	12,486	112	..	40,882	1,480	..	..	..	1,480
Unreserved lands—										
Miscellaneous	..	29,432	..	..	29,432	..	2,661	..	..	2,661
Total, Kurnool, East ..	28,284	41,918	112	..	70,314	1,480	2,661	..	..	4,141
Kurnool, South.										
Reserved forests—										
Teak	8,489	..	..	..	8,489	..	..	..	..	..
Maddi	5,618	..	..	..	5,618	..	..	..	..	..
Yegisi	2,941	..	..	..	2,941	..	..	..	..	..
Miscellaneous	24,265	15,885	1,670	20	41,840	..	..	..	..	..
Total ..	41,313	15,885	1,670	20	58,888	652,299	61,760	..	30	714,089
Unreserved lands—										
Miscellaneous	..	54,560	2,278	..	56,838	..	73,720	..	..	73,720
Total, Kurnool, South ..	41,313	70,445	3,948	20	115,726	652,299	135,480	..	30	787,809
Kurnool, West.										
Reserved forests—										
Teak	980	..	..	..	980	..	..	..	..	..
Maddi	4,719	..	..	..	4,719	..	..	..	..	..
Yegisi	3,805	..	..	..	3,805	..	..	..	..	..
Miscellaneous	143,984	60	475	787	145,306	..	..	..	..	..
Total ..	153,488	60	475	787	154,810	547,680	39,500	..	154,506	741,686
Unreserved forests—										
Miscellaneous	..	3,980	..	..	3,980	..	98,800	..	..	98,800
Total, Kurnool, West ..	153,488	4,040	475	787	158,790	547,680	138,300	..	154,506	840,486
										ABS-
Reserved forests—										
Sal (*Shorea robusta*) ..	15,172	117,535	..	..	132,707	..	..	..	..	..
Teak (*Tectona grandis*)..	12,932	4,524	..	..	17,456	..	..	..	..	..
Maddi (*Terminalia tomentosa*).	11,861	231	..	..	12,092	..	..	..	..	..
Yegisi (*Pterocarpus Marsupium*).	9,086	11,540	..	..	20,626	..	..	..	..	..
Yepi (*Hardwickia binata*).	216	47	..	..	263	..	..	..	..	..
Miscellaneous	198,222	96,657	33,193	807	328,879	..	..	..	..	..
Total, Reserved forests..	247,489	230,534	33,193	807	512,023	1,458,091	2,994,311	..	792,444	5,244,846

(in number) during the year 1913–14, and Agency of Exploitation—*cont.*

Outturn	Bamboos.									
	Government.		Purchasers.		Free-grantees.		Right-holders.		Total.	
	Number.	Value in Rs.	Number.	Value in Rs.	Number.	Value in Rs.	Number.	Value in Rs.	Number.	Value in Rs.
12	13		14		15		16		17	
C. FT.										
2,196,945	..	..	1,543,725	4,191	..	..	..	..	1,543,725	4,191
210,040	..	..	..	..	..	..	..	..	..	..
2,406,985	..	..	1,543,725	4,191	..	..	..	..	1,543,725	4,191
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
42,362	905	7	..	..	..	..	..	..	905	7
32,093	..	..	..	..	..	..	..	..	..	..
74,455	905	7	..	..	..	..	..	..	905	7
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
772,977	92,010	1,711	2,696,519	14,686	6,200	146	20	1	2,794,749	16,544
130,558	..	..	..	..	..	..	..	..	..	..
903,535	92,010	1,711	2,696,519	14,686	6,200	146	20	1	2,794,749	16,544
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
896,496	592,264	6,355	(a) 3,396,463	8,476	2,250	28	12,293	61	4,003,270	14,920
102,780	..	..	..	..	..	..	..	..	..	..
999,276	592,264	6,355	3,396,463	8,476	2,250	28	12,293	61	4,003,270	14,920

TRACT

..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
5,756,869	869,937	10,253	10,247,567	47,102	42,930	442	(a)12,318	62	11,172,747	57,859

(a) Corrected in the Board's office.

Outturn (in cubic feet solid) of Timber, Fuel and Bamboos

District.	Timber.					Fuel.				
	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.
1	2	3	4	5	6	7	8	9	10	11
NORTHERN CIRCLE—*cont.*	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.
Reserved lands—										
Teak (*Tectona grandis*) ..	3,171	576	1,460	..	5,207	..	..	..	..	..
Miscellaneous	86	320	531	..	937	..	..	..	..	..
Total, Reserved lands ..	3,257	896	1,991	..	6,144	..	240	..	..	240
Unreserved lands—										
Sal (*Shorea robusta*) ..	11,187	50,987	..	..	62,174	..	..	..	..	..
Teak (*Tectona grandis*) ..	957	17,008	734	..	18,699	..	..	..	..	..
Maddi (*Terminalia tomentosa*).	248	51,227	..	..	51,475	..	..	..	..	..
Yegisi (*Pterocarpus Marsupium*).	26	28,583	..	..	28,609	..	..	..	..	..
Yepi (*Hardwickia binata*).	..	1,112	..	..	1,112	..	..	..	..	..
Miscellaneous	17,141	1,433,621	12,386	188,700	1,651,848	..	..	..	..	..
Total, Unreserved lands ..	29,559	1,582,538	13,120	188,700	1,813,917	968	883,196	..	..	884,164
Total, Reserved forests, reserved lands and unreserved lands—										
Sal (*Shorea robusta*) ..	26,359	168,522	..	..	194,881	..	..	..	..	..
Teak (*Tectona grandis*) ..	17,060	22,108	2,194	..	41,362	..	..	..	..	..
Maddi (*Terminalia tomentosa*).	12,109	51,458	..	..	63,567	..	..	..	..	..
Yegisi (*Pterocarpus Marsupium*)	9,112	40,123	..	..	49,235	..	..	..	..	..
Yepi (*Hardwickia binata*).	216	1,159	..	..	1,375	..	..	..	..	..
Miscellaneous ..	215,449	1,530,598	46,110	189,507	1,981,664	..	..	..	..	..
Grand Total N. C. ..	280,305	1,813,968	48,304	189,507	2,332,084	1,459,059	3,877,747	..	792,444	6,129,250
CENTRAL CIRCLE.										
Bellary.										
Reserved forests—										
Miscellaneous	8,044	3,941	36	..	12,021	2,659	181,190	..	..	183,849
Leased forests—										
Sandalwood (*Santalum album*).	149	..	..	..	149	..	..	..	..	..
Miscellaneous	..	..	..	..	..	2,150	226,610	..	..	228,760
Unclassified forests—										
Miscellaneous	443	59,124	102	..	59,669	..	330,000	..	..	330,000
Total, Bellary ..	8,636	63,065	138	..	71,839	4,809	737,800	..	..	742,609
Anantapur.										
Reserved forests—										
Miscellaneous	..	3,350	12,420	..	15,770	3,125	9,500	..	..	12,625
Unreserved lands—										
Miscellaneous	..	713,935	15,120	..	729,055	..	104,850	..	..	104,850
Total, Anantapur ..	..	717,285	27,540	..	744,825	3,125	114,350	..	..	117,475
Guntūr.										
Reserved forests—										
Miscellaneous	..	15,104	..	..	15,104	..	422,560	..	..	422,560
Unclassified forests—										
Miscellaneous	..	327,728	16,752	..	344,480	..	279,440	..	..	279,440
Total, Guntūr ..	..	342,832	16,752	..	359,584	..	702,000	..	..	702,000
Cuddapah, West.										
Reserved forests—										
Miscellaneous	1,129	..	1,220	..	2,349	27,100	..	..	..	27,100
Unreserved lands—										
Miscellaneous	..	53,622	..	..	53,622	..	196,162	..	..	196,162
Total, Cuddapah, West ..	1,129	53,622	1,220	..	55,971	27,100	196,162	..	..	223,262

(in number) during the year 1913–14, and Agency of Exploitation—*cont.*

Total.	Bamboos.									
Outturn.	Government.		Purchasers.		Free-grantees.		Right-holders.		Total.	
	Number.	Value in Rs.	Number.	Value in Rs.	Number.	Value in Rs.	Number.	Value in Rs.	Number.	Value in Rs.
12	13		14		15		16		17	
C. FT.										
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
6,384	300	3	38,250	327	..	..	..	..	38,550	330
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
2,698,081	11,914	61	2,520,229	14,110	1,605	12	68,640	268	2,602,388	14,451
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
8,461,334	882,151	10,317	12,806,046	61,539	44,535	454	80,953	330	13,813,685	72,640
195,870	458	16	3,140	29	..	..	..	..	3,598	45
149	..	..	..	..	..	..	..	..	..	..
228,760	..	..	5,967	136	..	..	..	..	5,967	136
389,669	..	..	780	10	..	..	..	..	780	10
814,448	458	16	9,887	175	..	..	..	..	10,345	191
28,395	..	..	..	..	..	..	..	..	..	..
833,905	..	..	..	..	150	10	..	..	150	10
862,300	..	..	..	..	150	10	..	..	150	10
437,664	..	..	..	..	..	..	..	..	..	..
623,920	..	..	..	..	..	..	..	..	..	..
1,061,584	..	..	..	..	..	..	..	..	..	..
29,449	..	..	..	..	6,000	75	..	..	6,000	75
249,784	..	..	..	..	..	..	..	..	..	..
279,233	..	..	..	..	6,000	75	..	..	6,000	75

Outturn (in cubic feet solid) of Timber, Fuel and Bamboos

District.	Timber.					Fuel.				
	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free-grantees.	Right-holders	Total.
1	2	3	4	5	6	7	8	9	10	11
CENTRAL CIRCLE—*cont.*	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.		C. FT.
Cuddapah, East.										
Reserved forests—										
Miscellaneous	7,448	38,555	1,910	..	47,913	21,657	1,652,402	..	..	1,674,059
Unreserved lands—										
Miscellaneous	..	22,646	..	..	22,646	..	54,557	..	..	54,557
Total, Cuddapah, East ..	7,448	61,201	1,910	..	70,559	21,657	1,706,959	..	..	1,728,616
Nellore.										
Reserved forests—										
Miscellaneous	200	6,699	3,820	..	10,719	14,034	1,410,391	..	..	1,424,425
Unreserved lands—										
Miscellaneous	955	77,772	17,780	..	96,507	550	62,948	..	..	63,498
Total, Nellore ..	1,155	84,471	21,600	..	107,226	14,584	1,473,339	..	..	1,487,923
Chingleput.										
Reserved forests—										
Miscellaneous	357	2,748	..	..	3,105	701	177,101	..	..	177,802
Unreserved lands—										
Miscellaneous	..	142,029	4,440	..	146,469	..	185,269	..	..	185,269
Total, Chingleput ..	357	144,777	4,440	..	149,574	701	362,370	..	..	363,071
Chittoor.										
Reserved forests—										
Sandalwood (*Santalum album*).	70	..	..	..	70	..	..	..	..	..
Miscellaneous	1,772	..	..	..	1,772	28,920	257,037	..	..	285,957
Unreserved lands—										
Miscellaneous	..	118,128	10,580	..	128,708	..	138,489	..	..	138,489
Total, Chittoor ..	1,842	118,128	10,580	..	130,550	28,920	395,526	..	..	424,446
Grand total Central Circle ..	20,567	1,585,381	84,180	..	1,690,128	100,896	5,688,506	..	..	5,789,402
SOUTHERN CIRCLE.										
Vellore, North.										
Reserved forests—										
Miscellaneous	79	10,120	106	..	10,305	1,658	189,472	..	..	191,130
Unreserved lands—										
Miscellaneous	..	75,082	11,526	..	86,608	..	417,735	48	..	417,783
Total, Vellore, North ..	79	85,202	11,632	..	96,913	1,658	607,207	48	..	608,913
Vellore, South.										
Reserved forests—										
Sandalwood (*Santalum album*).	7,349	..	..	..	7,349	..	..	..	..	..
Miscellaneous	1,778	580	..	..	2,358	..	..	..	..	..
Total ..	9,127	580	..	..	9,707	21,502	242,960	..	..	264,462
Unreserved lands—										
Miscellaneous	..	117,134	4,880	..	122,014	..	63,168	..	..	63,168
Total, Vellore, South ..	9,127	117,714	4,880	..	131,721	21,502	306,128	..	..	327,630
Arcot, South.										
Reserved forests—										
Miscellaneous	1,185	370	..	..	1,555	22,319	845,435	400	..	868,154
Unreserved lands—										
Miscellaneous	1,567	106,281	15,513	..	123,361	20	203,465	..	..	203,485
Total, Arcot, South ..	752	106,651	15,513	..	124,916	22,339	1,048,900	400	..	1,071,639

(in number) during the year 1913–14, and Agency of Exploitation—*cont.*

Total.	Bamboos.									
Outturn	Government.		Purchasers.		Free-grantees.		Right-holders.		Total	
	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.
12	13		14		15		16		17	
c. FT.										
1,721,972	3,810	132	859,847	5,304	7,600	95	..	..	871,257	5,531
77,203	..	..	..	..	..	..	..	..	..	..
1,799,175	3,810	132	859,847	5,304	7,600	95	..	..	871,257	5,531
		RS. A. P.		RS. A. P.						RS. A. P.
1,435,144	1	0 3 0	..	..	..	..	..	..	1	0 3 0
160,005	..	..	16	0 8 0	..	..	..	..	16	0 8 0
1,595,149	1	0 3 0	16	0 8 0	..	..	..	..	17	0 11 0
180,907	..	..	..	..	..	..	..	..	..	..
331,738	35	2 3 0	460	42	760	47	..	..	1,255	91 0 0
512,645	35	2 3 0	460	42	760	47	..	..	1,255	91 0 0
..	..	..	..	..	..	..	..	..	..	..
287,799	4,816	46	896,439	5,539	..	..	..	..	901,255	5,585
267,197	..	..	..	..	265	3	..	..	265	3
554,996	4,816	46	896,439	5,539	265	3	..	..	901,520	5,588
7,479,530	9,120	196	1,766,649	11,060	14,775	230	..	..	1,790,544	11,486
201,435	..	..	1,811,640	15,902	1,480	18	..	..	1,813,120	15,920
504,391	..	..	1,440	10	..	..	..	..	1,440	10
705,826	..	..	1,813,080	15,912	1,480	18	..	..	1,814,560	15,930
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
274,169	..	..	3,976,776	34,947	1,080	7	..	..	3,977,856	34,954
185,182	..	..	123,750	750	..	..	..	..	123,750	750
459,351	..	..	4,100,526	35,697	1,080	7	..	..	4,101,606	35,704
869,709	1,720	196	43,343	266	..	..	..	..	45,063	462
326,846	..	..	223	10	100	3	..	..	323	13
1,196,555	1,720	196	43,566	276	100	3	..	..	45,386	475

Outturn (in cubic feet solid) of Timber, Fuel and Bamboos

District.	Timber.					Fuel.				
	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.
1	2	3	4	5	6	7	8	9	10	11
SOUTHERN CIRCLE—*cont.*	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.
Salem, North.										
Reserved forests—										
Sandalwood (*Santalum album*).	736	..	..	..	736	..	..	..	..	..
Miscellaneous	287	..	..	..	287	..	..	..	..	..
Total ..	1,023	..	..	..	1,023	..	174,134	..	..	174,134
Unreserved lands—										
Sandalwood (*Santalum album*).	130	..	..	..	130	..	..	..	..	..
Miscellaneous	2,191	127,153	3,527	..	132,871	..	..	..	..	..
Total ..	2,321	127,153	3,527	..	133,001	..	109,141	..	..	109,141
Total, Salem, North ..	3,344	127,153	3,527	..	134,024	..	283,275	..	..	283,275
Salem, South.										
Reserved forests—										
Sandalwood (*Santalum album*).	387	..	..	..	387	..	..	..	..	..
Miscellaneous	1,390	282	..	..	1,672	..	..	..	..	..
Total ..	1,777	282	..	..	2,059	..	469,699	..	..	469,699
Unreserved lands—										
Miscellaneous	..	138,973	840	..	139,813	2,160	82,444	..	..	84,604
Total, Salem, South ..	1,777	139,255	840	..	141,872	2,160	552,143	..	..	554,303
Trichinopoly.										
Reserved forests—										
Sandalwood (*Santalum album*).	17	..	..		17	..	..	..	..	..
Miscellaneous	137	1,437	..	..	1,574	..	..	..	..	..
Total ..	154	1,437	..	..	1,591	8,209	606,783	..	..	614,992
Unreserved lands—										
Miscellaneous	..	197,522	6,154	..	203,676	..	1,007,667	23,891	..	1,031,558
Total, Trichinopoly ..	154	198,959	6,154	..	205,267	8,209	1,614,450	23,891	..	1,646,550
Madura.										
Reserved forests—										
Teak (*Tectona grandis*) ..	827	758	67	..	1,652	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	..	142	..	..	142	..	..	..	..	..
Vengai (*Pterocarpus marsupium*)	253	954	..	..	1,207	..	..	..	..	..
Miscellaneous	2,486	1,440	3,000	..	6,926	..	..	..	..	..
Total ..	3,566	3,294	3,067	..	9,927	2,565	534,909	..	..	537,474
Unreserved lands—										
Miscellaneous	164	106,643	710	..	107,517	2,561	331,518	..	..	334,079
Total, Madura ..	3,730	109,937	3,777	..	117,444	5,126	866,427	..	..	871,553
Tinnevelly.										
Reserved forests—										
Miscellaneous	642	80,000	333	..	80,975	3,213	1,192,498	..	..	1,195,711
Unreserved lands—										
Miscellaneous	..	..	1,154	..	1,154	..	108,665	2,350	..	111,015
Total, Tinnevelly ..	642	80,000	1,487	..	82,129	3,213	1,301,163	2,350	..	1,306,726
Reserved forests—										
Sandalwood (*Santalum album*).	8,489	..	..	..	8,489	..	..	..	..	..
Teak (*Tectona grandis*) ..	827	758	67	..	1,652	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	..	142	..	..	142	..	..	..	..	..
Vengai (*Pterocarpus marsupium*)	253	954	..	..	1,207	..	..	..	..	..
Miscellaneous	7,984	94,229	3,439	..	105,652	..	..	..	..	..
Total, S.C. ..	17,553	96,083	3,506	..	117,142	59,466	4,255,890	400	..	4,315,756
Unreserved lands—										
Sandalwood (*Santalum album*).	130	..	..	..	130	..	..	..	..	..
Miscellaneous	3,922	868,788	44,301	..	917,014	..	..	..	..	..
Total, S.C. ..	4,052	868,788	44,304	..	917,141	4,741	2,323,803	26,289	..	2,354,833
Total, reserved forests and unreserved lands, S.C.	21,605	964,871	47,810	..	1,034,286	64,207	6,579,693	26,689	..	6,670,589

(in number) during the year 1913-14, and Agency of Exploitation—*cont.*

Total.	Bamboos.									
Outturn.	Government.		Purchasers.		Free-grantees.		Right-holders.		Total.	
	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs
12	13		14		15		16		17	
C. FT.										
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
175,157		..	1,256,600	19,454	..	..	..	..	1,256,600	19,454
..	..	..	..		..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
242,142	48	12	21,600	92	1,408	5		..	23,056	109
417,299	48	12	1,278,200	19,546	1,408	5	..	..	1,279 656	19,563
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
471,758	..	..	12,911,902	32,313	2,500	13	..	..	12,914,402	32,326
224,417	..	..	84,850	212	..	..	..	..	84,850	212
696,175	..	..	12,996,752	32,525	2,500	13	..	..	12,999,252	32,538
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..		..	..	..	..
616,583	58	12	94,820	5,604	..	..	..	..	94,878	5,616
1,235,234	..	..	1,575	157		..		..	1,575	157
1,851,817	58	12	96,395	5,761		..	..	..	96,453	5,773
..	..	..	..	..		..	..	..	..	..
..	..	..	..	..		..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
547,401	252	8	59,611	2,829	..	..	..	..	59,863	2,837
441,596	..	..	..	..		..	..	..	..	..
988,997	252	8	59,611	2,829	..	..	..	..	59,863	2,837
1,276,686	3,733	49	372,300	368		..	..	..	376,033	417
112,169	..	..			..	..	..	..	..	..
1,388,855	3,733	49	372,300	368	..	..	..	..	376,033	417
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..		..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
4,432,898	5,763	265	20,526,992	111,683	5,060	38	..	..	20,537,815	111,986
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
3,271,977	48	12	233,438	1,231	1,508	8	..	..	234,994	1,251
7,704,875	5,811	277	20,760,430	112,914	6,568	46	..	..	20,772,809	113,237

Outturn (in cubic feet solid) of Timber, Fuel and Bamboos

District.	Timber.					Fuel.				
	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.
1	2	3	4	5	6	7	8	9	10	11
WESTERN CIRCLE.	C. FT.	C. FT.	C. FT	C. FT.	C. FT	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.
South Canara.										
Reserved forests—										
Teak (*Tectona grandis*) ..	754	..	..	..	754	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	70	112	..	..	182	..	..	..	..	..
Pterocarpus Marsupium ..	52	425	..	..	477	..	..	..	..	..
Ironwood (*Xylia dolabriformis*)	153	139	..	..	292	..	..	..	..	..
Hopea parviflora..	12	318	..	..	330	..	..	..	..	..
Miscellaneous	3,922	4,042	..	..	7,964	..	..	..	.	..
Total ..	4,963	5,036	..	..	9,999	344,656	448,801	..	..	793,457
Unreserved lands—										
Teak (*Tectona grandis*)	..	1,106	..	1,725	2,831	..	..	..	..	..
Sandalwood (*Santalum album*).	1,977	14,751	..	..	16,728	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	..	750	..	725	1,475	..	..	..	..	..
Pterocarpus Marsupium ..	..	53	..	275	328	..	..	..	..	..
Ironwood (*Xylia dolabriformis*).	..	413	..	600	1,013	..	..	..	..	..
Hopea parviflora	..	3,742	1,180	27,625	32,547	..	..	..	..	..
Ebony (*Diospyros Ebenum*) ..	..	325	..	..	325	..	..	..	..	..
Miscellaneous	..	54,023	2,074	18,025	74,122	..	..	..	..	..
Total ..	1,977	75,163	3,254	48,975	129,369	..	742,397	2,500	..	745,897
Total, South Canara ..	6,940	80,199	3,254	48,975	139,368	344,656	1,192,198	2,500	..	1,539,354
Malabar, North.										
Reserved forests—										
Teak (*Tectona grandis*) ..	31,058	23,976	..	..	55,034	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	1,748	4,791	..	..	6,539	..	..	..	..	..
Pterocarpus Marsupium ..	1,843	5,137	..	..	6,980	..	..	..	..	..
Lagerstræmia microcarpa ..	1,037	974	..	..	2,011	..	..	..	..	..
Terminalia tomentosa ..	4,376	14,006	..	..	18,382	..	..	..	..	..
Miscellaneous	863	2,575	..	..	3,438	..	..	..	..	..
Total ..	40,925	51,459	..	..	92,384	16,147	80	..	..	16,227
Reserved lands—*Nil.*										
Unreserved lands—*Nil.*										
Total, Malabar, North ..	40,925	51,459	..	..	92,384	16,147	80	..	.	16,227
Malabar, South.										
Reserved forests—										
Teak (*Tectona grandis*) ..	3,730	1,590	.	..	5,320	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	42	77	..	..	119	..	..	..	..	..
Ironwood (*Xylia dolabriformis*).	1,850	467	..	..	2,317	..	..	..	.	..
Terminalia tomentosa	775	1,247	..	..	2,022	..	..	..	..	..
Miscellaneous	2,969	11,579	..	..	14,548	..	..	..	..	..
Total ..	9,366	14,960	..	..	24,326	290	264	..	..	554
Reserved lands—										
Ironwood (*Xylia dolabriformis*).	17	..	..	..	17		..	..	..	..
Miscellaneous	128	..	..	..	128		..	..	..	..
Total ..	145	..	..	..	145	..	60	..	..	60
Unreserved lands—										
Ironwood (*Xylia dolabriformis*).	..	218	.	..	218	..	..	.	..	..
Miscellaneous	..	1,509	..	..	1,509	..	..	..	..	..
Total ..	..	1,727	..	..	1,727	..	543	..	..	543
Leased forests—										
Teak (*Tectona grandis*) ..	81,976	..	..	..	81,976	..	..	..	..	..
Ironwood (*Xylia dolabriformis*).	30	..	..	..	30	..	..	..	..	..
Terminalia tomentosa	3	..	..	..	3	..	..	..	..	..
Miscellaneous	498	..	..	..	498	..	..	..	..	..
Total ..	82,507	..	..		82,507	1,148	..	.	..	1,148
Total, Malabar, South ..	92,018	16,687	..	..	108,705	1,438	867	..	..	2,305

(in number) during the year 1913-14. and Agency of Exploitation—*cont.*

Total.	Bamboos.									
Outturn	Government.		Purchasers.		Free-grantees.		Right-holders.		Total.	
	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.
12	13		14		15		16		17	
C. FT.										
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
803,456	16,996	1,870	12,707	191	2,700	40	..	..	32,403	2,101
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
875,266	.	..	21,450	322	6,200	93	..	..	27,650	415
1,678,722	16,996	1,870	34,157	513	8,900	133	..	..	60,053	2,516
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
108,611	21,600	1,914	18,262	198	..	..	..	..	39,862	2,142
108,611	21,600	1,944	18,262	198	..	..	..	..	39,862	2,142
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
24,880	16,671	1,000	20,000	520	..	..	..	..	36,671	1,520
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
205	35	2	..	..	..	..	..	..	35	2
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
2,270	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
83,655	33,662	2,020	10,975	414	..	..	..	..	44,637	2,434
111,010	50,368	3,022	30,975	934	..	..	..	..	81,343	3,956

Outturn (in cubic feet solid) of Timber, Fuel and Bamboos

District.	Timber.					Fuel.				
	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.
1	2	3	4	5	6	7	8	9	10	11
WESTERN CIRCLE—*cont.*	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.
The Nilgiris.										
Reserved forests—										
Teak (*Tectona grandis*) ..	..	123	..	..	123	..	..	..	..	..
Pterocarpus Marsupium ..	..	487	..	..	487	..	..	..	..	..
Sandalwood (*Santalum album*)..	411	..	..	..	411	..	..	..	..	..
Miscellaneous	..	4,499	45	..	4,544	..	..	..	..	..
Total ..	411	5,109	45	..	5,565	448,220	8,040	828	..	457,088
Reserved lands—										
Miscellaneous	..	..	223	..	223	..	84	63	..	147
Unreserved lands—										
Miscellaneous	..	12,017	..	..	12,017	..	..	..	..	..
Leased forests—										
Teak (*Tectona grandis*) .	3,478	65	..	..	3,543	..	..	..	..	..
Pterocarpus Marsupium ..	54	..	..	..	54	..	..	..	..	..
Miscellaneous	..	2,338	..	102	2,440	..		..	..	..
Total ..	3,532	2,403	..	102	6,037	..	340	..	..	340
Total, The Nilgiris ..	3,943	19,529	268	102	23,842	448,220	8,464	891	..	457,575
Kollegal.										
Reserved forests—										
Sandalwood (*Santalum album*)..	1,902	..	..	..	1,902	..	..	..	..	..
Miscellaneous	721	..	..	..	721	..	..	..	..	..
Total ..	2,623	..	..	..	2,623	135,320	620	..	..	135,940
Reserved lands—*Nil.*										
Unreserved lands—										
Miscellaneous	34	37,025	48	..	37,107	..	4,224	24	..	4,248
Total, Kollegal ..	2,657	37,025	48	..	39,730	135,320	4,844	24	..	140,188
Coimbatore, North.										
Reserved forests—										
Sandalwood (*Santalum album*)..	2,479	..	..	..	2,479	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	92	..	..	..	92	..	..	..	..	..
Miscellaneous	4,330	2,808	..	..	7,138	..	..	..	..	..
Total ..	6,901	2,808	..	..	9,709	542,616	5,785	..	.	548,401
Unreserved lands—										
Miscellaneous	..	10,123	12	..	10,135	..	7,071	..	..	7,071
Total, Coimbatore, North ..	6,901	12,931	12	..	19,844	542,616	12,856	..	..	555,472
Coimbatore, Central.										
Reserved forests—										
Teak (*Tectona grandis*).. ..	67	..	..	..	67	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	457	..	..	..	457	..	..	..	..	..
Pterocarpus Marsupium ..	383	..	..	..	383	..	..	..	..	..
Terminalia tomentosa	6	..	..	..	6	..	..	..	..	..
Miscellaneous	590	1,374	..	..	1,964	..	..	..	..	..
Total ..	1,503	1,374	..	..	2,877	78,028	699,394	..	..	777,422
Unreserved lands—										
Miscellaneous	..	139,030	4,448	..	143,478	..	272,975	..	.	272,975
Total, Coimbatore, Central ..	1,503	140,404	4,448	..	146,355	78,028	972,369	..	..	1,050,397
Coimbatore, South.										
Reserved forests—										
Teak (*Tectona grandis*) ..	2,631	..	..	..	2,631	..	..	..	..	..
Pterocarpus Marsupium ..	793	..	..	..	793	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	1,345	..	..	..	1,345	..	..	.	..	.
Lagerstræmia microcarpa ..	53	..	..	..	53	..	..	..	.	..
Miscellaneous	5,069	11,949	..	..	17,018	..	..	..	.	..
Total ..	9,891	11,949	..	..	21,840	68,540	340,881	..	..	409,421

(in number) during the year 1913-14, and Agency of Exploitation—*cont.*

Total.	Bamboos.									
Outturn.	Government.		Purchasers.		Free-grantees.		Right-holders.		Total.	
	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.
12	13		14		15		16		17	
C. FT.										
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
462,653	..	..	378,739	3,278	1,600	16	..	..	380,339	3,294
370	..	..	..	..	535	5	..	..	535	5
12,017	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
6,377	..	..	748	7	..	..	1,210	12	1,958	19
481,417	..	..	379,487	3,285	2,135	21	1,210	12	382,832	3,318
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
138,563	66,785	2,550	248,228	800	..	..	..	..	315,013	3,350
41,355	..	..	..	..	..	..	..	..	..	..
179,918	66,785	2,550	248,228	800	..	..	..	..	315,013	3,350
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
558,110	137	12	3,668,738	14,718	..	..	..	..	3,668,875	14,730
17,206	..	..	..	..	..	..	..	..	..	..
575,316	137	12	3,668,738	14,718	..	..	..	..	3,668,875	14,730
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
780,299	2,166	81	248,180	6,037	2,370	15	..	..	252,716	6,133
416,453	..	..	..	..	..	..	..	..	..	..
1,196,752	2,166	81	248,180	6,037	2,370	15	..	..	252,716	6,133
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
431,261	493	13	160,572	1,802	..	..	..	..	161,065	1,815

Outturn (in cubic feet solid) of Timber, Fuel and Bamboos

District.	Timber.					Fuel.				
	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.
1	2	3	4	5	6	7	8	9	10	11
WESTERN CIRCLE—*cont.*	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.
Coimbatore South—cont.										
Unreserved lands—										
Miscellaneous	..	..	360	..	360	..	..	..	..	..
Leased forests—										
Teak (*Tectona grandis*) ..	32,354	..	..	..	32,354	..	..	..	..	..
Terminalia tomentosa	31,369	..	..	..	31,369	..	..	..	..	..
Ironwood (*Xylia dolabriformis*).	3,921	..	..	..	3,921	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	1,161	..	..	..	1,161	..	..	..	..	..
Lagerstroemia microcarpa ..	3,263	..	..	..	3,263	..	..	..	..	..
Miscellaneous	19,758	341	..	..	20,099	..	..	..	..	..
Total ..	91,826	341	..	..	92,167	..	..	..	..	..
Total, Coimbatore, South ..	1,01,717	12,290	360	..	114,367	68,540	340,881	..	..	409,421
Reserved forests—										*Abs*
Teak (*Tectona grandis*) ..	38,240	25,689	..	..	63,929	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	3,754	4,980	..	..	8,734	..	..	..	..	..
Sandalwood (*Santalum album*).	4,792	..	..	..	4,792	..	..	..	..	..
Ironwood (*Xylia dolabriformis*).	2,003	606	..	..	2,609	..	..	..	..	..
Pterocarpus Marsupium ..	3,071	6,049	..	..	9,120	..	..	..	..	..
Lagerstrœmia microcarpa ..	1,090	974	..	..	2,064	..	..	..	..	..
Hopea parviflora	12	318	..	..	330	..	..	..	..	..
Terminalia tomentosa	5,157	15,253	..	..	20,410	..	..	..	..	..
Miscellaneous	18,464	38,826	45	..	57,335	..	..	..	..	..
Total ..	76,583	92,695	45	..	169,323	1,633,817	1,503,865	828	..	3,138,510
Reserved lands—										
Ironwood (*xylia dolabriformis*).	17	..	..	..	17	..	..	..	..	..
Miscellaneous	128	..	223	..	351	..	..	..	..	..
Total ..	145	..	223	..	368	..	144	63	..	207
Unreserved lands—										
Teak (*Tectona grandis*) ..	..	1,106	..	1,725	2,831	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	..	750	..	725	1,475	..	..	..	..	..
Pterocarpus Marsupium.. ..	..	53	..	275	328	..	..	..	..	..
Ironwood (*Xylia dolabriformis*).	..	631	..	600	1,231	..	..	..	..	..
Hopea parviflora	..	3,742	1,180	27,625	32,547	..	..	..	..	..
Sandalwood (*Santalum album*).	1,977	14,751	..	..	16,728	..	..	..	..	..
Ebony (*Diospyros Ebenum*) ..	..	325	..	..	325	..	..	..	..	..
Miscellaneous	34	253,727	6,942	18,025	278,728	..	..	..	..	..
Total ..	2,011	275,085	8,122	48,975	334,193	..	1,028,210	2,524	..	1,030,734
Leased forests—										
Teak (*Tectona grandis*)	117,808	65	..	..	117,873	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	1,161	..	..	..	1,161	..	..	..	..	..
Ironwood (*Xylia dolabriformis*).	3.951	..	..	..	3,951	..	..	..	..	..
Pterocarpus Marsupium.. ..	54	..	..	..	54	..	..	..	..	..
Terminalia tomentosa	31,372	..	..	..	31,372	..	..	..	..	..
Lagerstrœmia microcarpa ..	3,263	..	..	..	3,263	..	..	..	..	..
Miscellaneous	20,256	2,679	..	102	23,037	..	..	..	..	..
Total ..	177,865	2,744	..	102	180,711	1,148	340	..	..	1,488
Reserved forests, reserved lands, unreserved lands and leased forests—										
Teak (*Tectona grandis*)	156,048	26,860	..	1,725	184,633	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	4,915	5,730	..	725	11,370	..	..	..	..	..
Sandalwood (*Santalum album*).	6,769	14,751	..	..	21,520	..	..	..	..	..
Ironwood (*Xylia dolabriformis*).	5,971	1,237	..	600	7,808	..	..	..	..	..
Pterocarpus Marsupium ..	3,125	6,102	..	275	9,502	..	..	..	..	..
Terminalia tomentosa	36,529	15,253	..	..	51,782	..	..	..	..	..
Lagerstrœmia microcarpa ..	4,353	974	..	..	5,327	..	..	..	..	..
Hopea parviflora	12	4,060	1,180	27,625	32,877	..	..	..	..	..
Ebony (*Diospyros Ebenum*) ..	..	325	..	..	325	..	..	..	..	..
Miscellaneous	38,882	295,232	7,210	18,127	359,451	..	..	..	..	..
Grand Total, W.C.	256,604	370,524	8,390	49,077	684,595	1,634,965	2,532,559	3,415	..	4,170,939

(in number) during the year 1913–14, and Agency of Exploitation—*cont.*

Total.	Bamboos.									
Outturn.	Government.		Purchasers.		Free-grantees.		Right-holders.		Total.	
	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.
12	13		14		15		16		17	
C. FT.										
360	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
92,167	..	..	..	..	..	..	..	..	..	..
523,788	493	13	160,572	1,802	..	..	..	..	161,065	1,815
tract.										
..										
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
.	..	..	..	..	..	..	..	..	.	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
3,307,833	124,848	7,470	4,755,426	27,544	6,670	71	..	..	4,886,944	35,085
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	.	..
575	35	2	..	..	535	5	..	..	570	7
..	.	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	.	..	..	..	..	..	..	..	..	..
1,364,927	..	..	21,450	322	6,200	93	..	..	27,650	415
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
.	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
182,199	33,662	2,020	11,723	421	..	..	1,210	12	46 595	2,453
..	..	..	..	..	..	..	..	..	.	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	.	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	.	..	..	..
..	..	.	..	..	..	..	..		..	..
..	..	..	..	..	..	..	..	..	..	..
..	.	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
4,855,534	158,545	9,492	4,788,599	28,287	13,405	169	1,210	12	4,961,759	37,960

Outturn (in cubic feet solid) of Timber, Fuel and Bamboos

District.	Timber.					Fuel.				
	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.
1	2	3	4	5	6	7	8	9	10	11
										ABS
	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C F.T.	C. FC.	C. FT.
Sal (*Shorea robusta*)	26,359	168,522	..	..	194,881	..	..	..	..	..
Teak (*Tectona grandis*)	173,935	49,726	2,261	1,725	227,647	..	..	..	..	..
(*Terminalia tomentosa*) ..	48,638	66,711	..	..	115,349	..	..	..	..	..
(*Pterocarpus Marsupium*) ..	12,490	47,179	..	275	59,944	..	..	..	..	..
(*Handwickia binata*).. ..	216	1,159	..	..	1,375	..	..	..	..	..
Rosewood (*Dalbergia latifolia*) ..	4,915	5,872	..	725	11,512	..	..	..	..	..
Ironwood (*Xylia dolabriformis*) ..	5,971	1,237	..	600	7,808	..	..	..	..	..
Sandalwood (*Santalum album*) ..	15,607	14,751	..	..	30,358	..	..	..	..	..
Ebony (*Diospyros Ebenum*) ..	..	325	..	..	325	..	..	..	..	..
Hopea parviflora	12	4,060	1,180	725	32,877	..	..	..	..	..
Logerotroemia microcarpa ..	4,353	974	..	..	5,327	..	..	..	..	..
Miscellaneous	286,585	4,374,228	185,243	207,634	5,053,690	..	..	..	..	..
Grand Total ..	579,081	4,734,744	188,684	238,584	5,741,093	3,259,127	18,678,505	30,104	792,444	22,760,180

(in number) during the year 1913–14, and Agency of Exploitation—*cont.*

Total.	Bamboos.									
Outturn.	Government.		Purchasers.		Free-grantees.		Right-holders.		Total	
	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.
12	13		14		15		16		17	
TRACT.										
C. FT.										
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..		..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..
28,501,273	1,055,627	20,282	40,121,724	2,13,800	79,283	899	82,163	342	41,338,797	2,35,323

ANNUAL FORM No. 77.

Forest Department, Madras Presidency.

OUTTURN of Minor Forest Produce during the year 1913–14.

Circle.	Description of produce.	Produce removed or utilized.					
		By Government Agency.		By purchasers.	By free grants.	By right-holders.	Total.
		Quantity.	Value.	Value.	Value.	Value.	Value.
1	2	3	4	5	6	7	8	
			Rs.	Rs.	Rs.	Rs.	Rs.
Northern Circle ..	Grazing and fodder grass ..	..	..	1,24,742	..	1,079	1,25,821
	Grass (tharbi, korai, etc.). ..	66,078	826	1,470	62	..	2,358
	Tamarind, soapnuts, galnuts, nux-vomica, sheakoy, etc.	18,119	1,294	35,403	..	..	36,697
	Horns, honey, wax, resin, gum, skins, etc.	27	9	1,433	..	..	1,442
	Tangedu, etc., barks and fibres.	..	..	14,199	1	..	14,200
	Stone, gravel, earth, etc. ..	..	..	4,878	15	..	4,893
	Leaves for platters	..	..	567	..	..	567
	Date and palmyra leaves, stacks, etc.	1,375	6	404	..	..	410
	Manure leaves and thorns ..	..	..	5	..	..	5
	Miscellaneous including tree tapping and tree owner's fees	3,914	8,615	60,337	..	23,570	92,522
	Total ..	89,508	10,750	(c)2,43,438	(d) 78	24,649	(e)2,78,915
Central Circle ..	Grazing and fodder grass ..	37,384	7,926	2,70,931	1,813	150	2,80,820
	Grass (thatch) and korai, etc. ..	220	2	891	28	..	921
	Tamarind, soapnuts and gallnuts.	11,637	8,945	33,744	..	..	42,689
	Horns, honey wax, gums, etc.	12	92	759	..	..	851
	Tangedu, vembadam, etc. ..	175	358	2,09,241	..	..	2,09,599
	Mica stone, gravel, etc. ..	480	1	49,767	25	..	49,793
	Manure leaves, thorns, etc. ..	..	..	5,535	..	..	5,535
	Date, palmyra leaves, etc. ..	80	3	5,460	591	..	6,054
	Miscellaneous including tree-tapping and tree-owners' fees.	2,287	1,614	1,16,258	..	..	1,17,872
	Total ..	52,275	18,941	6,92,586	2,457	150	7,14,134
Southern Circle ..	Grazing and fodder grass ..	850	57	2,05,053	(a) 3,033 (b) 469	..	2,08,612
	Grass (thatch, korai, etc.) ..	216	2	6,190	3	50	6,245
	Dammer, cardamoms, etc. ..	3	136	7,316	..	..	7,452
	Tamarind, soapnuts, gallnuts, etc.	..	..	16,685	..	..	16,685
	Horns, honey, wax, gum, etc. ..	13	29	1,085	..	..	1,114
	Avaram, vembadam, etc., barks.	..	..	17,728	..	..	17,728
	Stones, gravel and earth ..	..	..	9,761	25	..	9,786
	Manure leaves, thorns, etc. ..	..	..	31,916	..	..	31,916
	Date, palmyra leaves, etc. ..	..	..	518	30	..	548
	Miscellaneous including tree tapping fees.	652	482	1,32,841	117	2,339	1,35,779
	Total ..	1,734	706	4,29,093	3,677	2,389	4,35,865
	Reserved forests.						
Western Circle.	Grass and grazing	1,913	476	80,542	..	837	81,855
	Grass (thatch, korai, etc.) ..	100	12	656	..	19	687
	Dammer, turmeric, pepper, cardamoms, etc.	61	136	4,807	..	..	4,943
	Tamarind, soapnuts, gallnuts, nux-vomica, sheakoy, etc.	7,808	9,067	5,773	..	..	14,840
	Horns, honey, wax, gum, resin, skins, etc.	712	3,678	1,229	..	..	4,902
	Avaram, vembadam, etc., barks and fibres.	269	68	3,139	..	..	3,207
	Stones, gravel, earth, etc. ..	..	..	1,157	..	..	1,157
	Manure leaves, thorns, etc. ..	..	..	404	..	..	404
	Date and palmyra leaves ..	..	..	955	..	..	955
	Miscellaneous	64	534	3,253	..	..	3,787
	Total ..	10,927	13,966	1,01,915	..	856	1,16,737

(a) Free removal of grass.
(b) Free grazing.
(c) Excludes Rs 8,011-13-4 belonging to the Parlakimedi Maliahs.
(d) Excludes Rs. 45-5-0 belonging to the Parlakimedi Maliahs.
(e) Excludes Rs. 8,057-2-4 belonging to the Parlakimedi Maliahs.

Outturn of Minor Forest Produce during the year 1913-14—*cont.*

Circle.	Description of produce.	Produce removed or utilized.					
		By Government Agency.		By purchasers.	By free-grantees.	By right-holders.	Total.
		Quantity.	Value.	Value.	Value.	Value.	Value.
1	2	3	4	5	6	7	8
	Reserved lands.		Rs.	Rs.	Rs.	Rs.	Rs.
	Grass and grazing	..	..	581	..	..	581
	Dammer, turmeric, pepper, cardamoms, etc.	..	..	697	..	..	697
	Tamarind, soapnuts, gallnuts, nux-vomica, sheakoy.	..	..	6	..	..	6
	Total ..	..	..	1,284	..	..	1,284
	Leased forests.						
	Grass (thatch, korai), etc. ..	..	..	12	..	..	12
	Horns, honey, wax, gum, resin, skins, etc.	40	225	..	..	..	225
Western Circle—*cont.*	Tamarind, soapnuts, gallnuts, nux-vomica, sheakoy, etc.	27	36	..	..	..	36
	Dammer, turmeric, pepper, cardamoms, etc.	3	7	..	..	..	7
	Total ..	70	268	12	..	..	280
	Unreserved lands.						
	Catechu	1,244	13,995	...	..	..	13,995
	Tamarind, soapnuts, gallnuts, nux-vomica, sheakoy, etc.	...	..	5,845	..	..	5,845
	Avaram, vembadam, etc., barks and fibres.	..	..	1,638	..	..	1,638
	Stones, gravel, earth, etc. ..	..	..	1,106	447	..	1,553
	Date and palmyra leaves ..	..	..	1,719	23	..	1,742
	Manure leaves, thorns, etc. ..	..	..	16	..	..	16
	Miscellaneous	..	..	30,670	..	..	30,670
	Total ..	1,244	13,995	40,994	470	..	55,459
	Grand total ..	12,241	28,229	1,44,205	470	856	1,73,760
	Grazing and fodder grass ..	40,147	8,459	6,81,849	5,315	2,066	6,97,689
	Grass (thatch, korai, etc.) ..	66,609	842	9,219	93	69	10,223
	Tamarind, soapnuts, gallnuts, nux-vomica, etc.	37,591	19,342	97,456	..	..	1,16,798
	Horns, honey, wax, resin, etc.	804	4,028	4,506	..	..	8,534
	Dammer, cardomum, pepper, etc.	67	279	12,820	..	..	13,099
Total, Presidency.	Tangedu bark, vembadam, fibres, etc.	444	426	2,45,945	1	..	2,46,373
	Mica stone, gravel, etc. ..	480	1	66,669	512	..	67,182
	Leaves for platters, etc. ..	..	..	567	..	..	567
	Date, palmyra leaves, etc. ..	1,455	9	9,056	644	..	9,709
	Manure leaves, etc.	..	..	37,876	...	..	37,876
	Catechu	1,244	13,995	.	..	..	13,995
	Miscellaneous	6,917	11,245	3,43,359	117	25,909	3,80,630
	Grand Total, Presidency ..	155,758	58,626	15,09,322	6,682	28,044	16,02,674

ANNUAL FORM No. 78.

Forest Department, Madras Presidency.

ACCOUNT of timber and other produce cut or collected by Government Agency and brought to depôt, sold locally or otherwise disposed of during 1913–14.

District.	Balance at commencement of the year in forest and sale depôts.	Received during the year.	Total.	Disposed of during the year.	Balance on hand at close of the year in forest and sale depôts.
1	2	3	4	5	6
TIMBER (CUBIC FEET).					
Northern Circle.					
Ganjam	* (i) 12,838	(j) 42,350	(k) 55,188	(l) 49,873	(m) 5,315
Vizagapatam	1,393	738	2,131	1,972	159
Godāvari, Upper	17,171	7,406	24,577	18,107	6,470
Do. Lower	2	6,561	6,563	6,291	272
Kistna	..	165	165	165	..
Kurnool, East	846	28,284	29,130	27,206	1,924
Do. South	13,742	41,313	55,055	42,573	12,482
Do. West	27,410	153,488	180,898	170,860	10,038
Total	73,402	280,305	353,707	317,047	36,660
Central Circle.					
Bellary	1,108	8,636	9,744	8,993	751
Anantapur	..	..	..		..
Guntūr	4,156	..	4,156	4,120	36
Cuddapah, West	1,713	1,129	2,842	2,048	794
Do. East	7,082	7,448	14,530	12,973	1,557
Nellore	345	1,155	1,500	1,179	321
Chingleput	..	357	357	320	37
Chittoor	66	1,842	1,908	1,908	..
Total	14,470	20,567	35,037	31,541	3,496
Southern Circle.					
Vellore, North	7	79	86	85	1
Do. South	5,985	9,127	15,112	10,067	5,045
Arcot, South	..	2,752	2,752	2,721	31
Salem, North	1,240	3,344	4,584	4,491	93
Do. South	285	1,777	2,062	1,622	440
Trichinopoly	13	154	167	154	13
Madura	27	3,730	3,757	2,696	1,061
Tinnevelly	4,949	642	5,591	5,436	155
Total	12,506	21,605	34,111	27,272	6,839
Western Circle.					
South Canara	8,366	6,940	15,306	6,570 (a) 430 (b) 43	8,263
Malabar, North	24,841	40,925	65,766	14,435 (a) 1,435 (b) 3,513 (c) 905 (g) 15	45,463
Do. South	75,246	92,018	167,264	76,368 (a) 2,908 (b) 2,978 (d) 940	84,070
The Nilgiris	29,665	3,943	33,608	31,693 (b) 1,046	869
Kollegal	1,867	2,657 (c) 905	5,429	2,654 (b) 14 (e) 1,867	894
Coimbatore, North	5,176	6,901 (f) 1,453 (e) 1,867	15,397	8,793 (a) 396 (b) 742 (h) 157	5,309
Do. Central	443	1,503	1,946	1,080 (b) 27	839
Do. South	274,365	101,717 (d) 940	377,022	69,152 (f) 1,453 (a) 3,967 (b) 1,955	300,495
Total	419,969	261,769	681,738	235,536	446,202
Grand Total, Presidency	520,347	584,246	1,104,593	611,396	493,197

* Reported by Collector as correct figure.

(a) Used departmentally.
(b) Written off the accounts.
(c) Transferred from North Malabar to Kollegal.
(d) Do. do. South Malabar to South Coimbatore.
(e) Do. do. Kollegal to North Coimbatore.
(f) Do. do. South Coimbatore to North Coimbatore.
(g) Deficit in conversion or remeasurement.
(h) Deducted having been shown wrongly in the return of last year.
(i) Excludes 1,558 c.ft. belonging to Parlakimedi Maliahs.
(j) Do. 16 ,, do.
(k) Do. 1,574 ,, do.
(l) Do. 1,571 ,, do.
(m) Do. 3 ,, do.

Account of timber and other produce cut or collected by Government Agency and brought to depôt, sold locally or otherwise disposed of during 1913–14—*cont.*

District.	Balance at commencement of the year in forest and sale depôts.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in forest and sale depôts.
1	2	3	4	5	6
FUEL (CUBIC FEET).					
Northern Circle.					
Ganjam	(*c*) 1,000	(*d*) 26,577	(*e*) 27,577	(*f*) 26,388	(*g*) 1,189
Vizagapatam	742	175,224	175,966	173,354	2,612
Godâvari, Upper	3,071	648	3,719	850	2,869
Do. Lower	22,823	38,627	61,450	57,805	3,645
Kistna	4,800	16,524	21,324	21,324	..
Kurnool, East	260	1,480	1,740	1,740	..
Do. South	200,676	652,299	852,975	511,870	341,105
Do. West	90,491	547,680	638,171	591,558	46,613
Total	323,863	1,459,059	1,782,922	1,384,889	398,033
Central Circle.					
Bellary	5,973	4,809	10,782	8,832	1,950
Anantapur	..	3,125	3,125	3,000	125
Guntûr	125,640	..	125,640	123,030	2,610
Cuddapah, West	11,900	27,100	39,000	26,600	12,400
Do. East	100,905	21,657	122,562	91,476	31,086
Nellore	17,650	14,584	32,234	25,013	7,221
Chingleput	1,020	701	1,721	1,721	..
Chittoor	2,376	28,920	31,296	31,296	..
Total	265,464	100,896	366,360	310,968	55,392
Southern Circle.					
Vellore, North	23,245	1,658	24,903	23,171	1,732
Do. South	2,516	21,502	24,018	6,311	17,707
Arcot, South	20	22,339	22,359	21,510	849
Salem, North	..	..	..	..	..
Do. South	..	2,160	2,160	2,160	..
Trichinopoly	2,850	8,209	11,059	10,532	527
Madura	100	5,126	5,226	4,986	240
Tinnevelly	6,918	3,213	10,131	9,135	996
Total	35,649	64,207	99,856	77,805	22,051
Western Circle.					
South Canara	285,652	344,656	630,308	243,327 (*a*) 603 (*b*) 13,011	373,367
Malabar, North	4,139	16,147	20,286	1,860 (*a*) 118	18,308
Do. South	..	1,438	1,438	1,438	..
The Nilgiris	209,521	448,220	657,741	470,862 (*b*) 1,376	185,503
Kollegal	296,879	135,320	432,199	185,603 (*b*) 4,106	242,490
Coimbatore, North	98,000	542,616	640,616	536,611 (*b*) 760	103,245
Do. Central	61,850	78,028	139,878	130,594 (*b*) 8,884	400
Do. South	30,300	68,540	98,840	51,580 (*a*) 400 (*b*) 160	46,700
Total	986,341	1,634,965	2,621,306	1,651,293	970,013
Grand Total, Presidency	1,611,317	3,259,127	4,870,444	3,424,955	1,445,489

(*a*) Used departmentally.
(*b*) Written off the accounts.
(*c*) Excludes 4,374·89 c.ft. belonging to Parlakimedi Maliahs.
(*d*) Do. 18·17 ,, do.
(*e*) Do. 4,393·06 ,, do.
(*f*) Do. 4,374·89 ,, do.
(*g*) Do. 18·17 ,, do.

Account of timber and other produce cut or collected by Government Agency and brought to depôts, sold locally or otherwise disposed of during 1913–14—*cont.*

District.	Balance at commencement of the year in forest and sale depôts.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in forest and sale depôts.
1	2	3	4	5	6
BAMBOOS (NUMBER).					
Northern Circle.					
Ganjām	(*e*) 7,999	(*f*) 123,048	(*g*) 131,047	(*h*) 128,842	(*i*) 2,205
Vizagapatam	1,070	42,979	44,049	44,049	..
Gōdāvari, Upper	425	9,150	9,575	7,750	1,825
Do. Lower	..	21,795	21,795	21,795	..
Kistna	..	..	..	..	..
Kurnool, East	100	905	1,005	805	200
Do. South	20,138	92,010	112,148	112,056	92
Do. West	..	592,264	592,264	592,264	..
Total ..	29,732	882,151	911,883	907,561	4,322
Central Circle.					
Bellary	150	458	608	533	75
Anantapur	..	..	..	..	..
Guntūr	..	..	..	..	..
Cuddapah, West	..	..	..	..	..
Do. East	..	3,810	3,810	3,810	..
Nellore	12	1	13	13	..
Chingleput	..	35	35	35	..
Chittoor	..	4,816	4,816	4,816	..
Total ..	162	9,120	9,282	9,207	75
Southern Circle.					
Vellore, North	..	..	..	..	..
Do. South	..	..	..	..	..
Arcot, South	..	1,720	1,720	1,720	..
Salem, North	..	48	48	48	..
Do. South	..	..	..	..	..
Trichinopoly	..	58	58	58	..
Madura	..	252	252	252	..
Tinnevelly	..	3,733	3,733	3,274	459
Total ..	..	5,811	5,811	5,352	459
Western Circle.					
South Canara	5,840	16,996	22,836	19,597 (*b*) 521 (*c*) 694	2,624
Malabar, North	5,427	21,600	27,027	20,842 (*a*) 1,425	4,760
Do. South	17,935	50,368	68,303	45,558 (*a*) 5,680 (*b*) 4,042 (*d*) 506	12,517
Kollegal	12,554	66,785	79,339	42,331	37,008
Coimbatore, North	..	137	137	137	..
Do. Central	..	2,166	2,166	2,166	..
Do. South	..	493	493	493	..
Total ..	41,756	158,545	200,301	143,992	56,309
Grand Total, Presidency ..	71,650	1,055,627	1,127,277	1,066,112	61,165

(*a*) Used departmentally.
(*b*) Written off the accounts.
(*c*) Deducted having been shown wrongly in the return of last year.
(*d*) Sent to Edinburgh in connection with the opening of a paper pulp factory at Beypore.
(*e*) Excludes 1,099 bamboos belonging to Parlakimedi Maliahs.
(*f*) Do. 46,948 do.
(*g*) Do. 48,047 do.
(*h*) Do. 46,283 do.
(*i*) Do. 1,764 do.

Account of timber and other produce cut or collected by Government Agency and brought to depôts, sold locally or otherwise disposed of during 1913–14—*cont.*

District.	Balance at commencement of the year in forest and sale depôts.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in forest and sale depôts.
1	2	3	4	5	6
MINOR PRODUCE (MAUNDS OF 28 LB.)					
Northern Circle.					
Ganjam	71	280	351	145	206
Vizagapatam	6,564	5,477	12,041	12,041	..
Godavari, Upper	39,060	3,256	42,316	2,520	39,796
Do. Lower	..	58,786	58,786	58,715	71
Kistna	52	345	397	267	130
Kurnool, East	2,405	18,075	20,480	18,779	1,701
Do. South	633	308	941	794	147
Do. West	570	2,981	3,551	3,069	482
Total	49,355	89,508	138,863	96,330	42,533
Central Circle.					
Bellary	100	165	265	264	1
Anantapur	32	6	38	28	10
Guntur	13,251	22,864	36,115	30,900	5,215
Cuddapah, West	315	50	365	365	..
Do. East	4,565	15,620	20,185	18,410	1,775
Nellore	* 2,567	13,042	15,609	11,200	4,309
Chingleput	* 76	284	360	268	92
Chittoor	..	244	244	244	..
Total	20,906	52,275	73,181	61,779	11,402
Southern Circle.					
Vellore, North	580	132	712	418	294
Do. South	..	4	4	1	3
Arcot, South	..	140	140	140	..
Salem, North	40	..	40	40	..
Do. South	340	720	1,060	1,060	..
Trichinopoly	..	343	343	335	8
Madura	..	176	176	169	7
Tinnevelly	57	219	276	276	.. †
Total	1,017	1,734	2,751	2,439	312
Western Circle.					
South Canara	3	2,833	2,836	1,657	1,179
Malabar, North	(*a*)	1	1	(*a*)	1
Do. South	(*a*)	1	1	1	..
The Nilgiris	4	141	145	122	23
Kollegal	191	1,711	1,902	347 (*b*) 6	1,549
Coimbatore, North	242	5,977	6,219	3,258 (*b*) 81	2,880
Do. Central	27	713	740	607	133
Do. South	236	864	1,100	935 (*a*) 40 (*b*) 20	105
Total	703	12,241	12,944	7,074	5,870
Grand Total, Presidency	71,981	155,758	227,739	167,622	60,117

* Revised figures furnished by the Collector. † Less than half a maund.

(*a*) Less than one quarter. (*b*) Written off the accounts. (*c*) Used departmentally.

ANNUAL FORM No. 79.

Forest Department, Madras Presidency.

STATEMENT showing the value of Timber and other Produce at Sale depôts for 1913–14.

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.	
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.
1	2	3	4	5	6	7	8	9	10
	Northern Circle.			RS.			RS.	RS.	RS.
Ganjam ..	Timber	..	(a) 8,108	(b) 5,061	..	(e) 3,217	(f) 2,033	..	3,028
	Fuel	..	600	19	..	96	3	..	16
	Bamboos ..	(c) 5,080 MDS.	..	(d) 91	(g) 2,205 MDS.	..	(h) 16	..	75
	Minor produce ..	53	..	1,042	127	..	1,476	434	..
Vizagapatam.	Timber	..	1,375	172	..	143	48	..	124
	Fuel	..	192	32	..	114	19	..	13
	Bamboos ..	..	..	..	..	..	..	..	..
	Minor produce ..	..	..	..	..	..	..	..	..
Gōdāvari, Upper.	Timber	..	..	..	..	..	..	..	..
	Fuel	..	..	..	..	..	..	..	..
	Bamboos ..	..	..	..	..	..	..	..	..
	Minor produce ..	..	..	..	..	..	..	..	..
Gōdāvari, Lower.	Timber	..	..	..	..	..	..	..	..
	Fuel	..	..	..	..	..	..	..	..
	Bamboos ..	..	..	..	..	..	..	..	..
	Minor produce ..	..	..	..	..	..	..	..	..
Kistna ..	Timber	..	..	..	..	..	..	..	..
	Fuel	..	..	..	..	..	..	..	..
	Bamboos ..	..	..	..	..	..	..	..	..
	Minor produce ..	..	..	..	..	..	..	..	..
Kurnool, East.	Timber	..	..	..	..	..	..	..	..
	Fuel	..	..	..	..	..	..	..	..
	Bamboos ..	..	..	..	..	..	..	..	..
	Minor produce ..	..	..	..	..	..	..	..	..
Kurnool, South.	Timber	..	13,742	10,306	..	12,482	9,361	..	945
	Fuel	..	200,676	7,595	..	341,105	15,792	8,197	..
	Bamboos ..	20,138 MDS.	..	463	92 MDS.	..	2	..	461
	Minor produce ..	633	..	715	147	..	526	..	189
Kurnool, West.	Timber	..	..	..	..	..	..	..	..
	Fuel	..	..	..	..	27	10	10	..
	Bamboos ..	..	..	..	..	..	..	..	..
	Minor produce ..	..	..	..	345 MDS.	..	77	77	..
	Central Circle.								
Bellary ..	Timber	..	..	..	..	..	..	..	..
	Fuel	..	5,973	112	..	1,950	56	..	56
	Bamboos ..	..	..	..	..	..	..	..	..
	Minor produce.	..	..	..	..	..	..	..	..
Anantapur ..	Timber	..	..	..	..	..	..	..	..
	Fuel	..	..	..	..	125	8	8	..
	Bamboos ..	..	..	..	..	..	..	..	..
	Minor produce.	32 MDS.	..	128	10 MDS.	..	40	..	88
Guntūr ..	Timber ..	..	..	..	..	..	..	..	..
	Fuel	..	..	..	..	..	..	..	..
	Bamboos ..	..	..	..	..	..	..	..	..
	Minor produce.	103 MDS.	..	26	2,135 MDS.	..	267	241	..

NOTE.—The figures in columns 3, 4 and 5 against Ganjām relate only to sale depôts as per revised return furnished by Collector.

(a) Excludes 4,373·89 cubic feet belonging to Parlākimedi Maliahs.
(b) Do. Rs. 380 belonging to do.
(c) Do. 1,099 bamboos do. do.
(d) Do. Rs. 30 do. do.
(e) Do. 18·17 cubic feet do. do.
(f) Do. Rs. 27-8-0 do. do.
(g) Do. 1,764 bamboos do. do.
(h) Do. Rs. 42-8-0 do. do.

Statement showing the value of Timber and other Produce at Sale depots for 1913-14—*cont.*

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in valu	
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.
1	2	3	4	5	6	7	8	9	10
	Central Circle—cont.			Rs.			Rs.	Rs.	Rs.
Cuddapah, West.	Timber	..	1,533	2,117	..	794	794	..	1,323
	Fuel	..	6,900	414	..	10,000	200	..	214
	Bamboos	..	..	..	..	..	..	..	..
	Minor produce.	..	..	..	..	..	..	..	..
Cuddapah, East.	Timber	..	3,334	2,373	..	..	..	..	2,373
	Fuel	..	32	24	..	..	..	..	24
	Bamboos	..	..	..	..	..	..	..	..
	Minor produce.	2,690	..	622	1,436	..	370	..	252
Nellore	Timber	..	..	..	..	..	..	..	..
	Fuel	..	..	..	..	..	..	..	..
	Bamboos	..	..	..	..	..	..	..	..
	Minor produce.	MDS. 2,139	..	1,182	MDS. 3,949	..	1,268	86	..
Chingleput.	Timber	..	..	..	..	..	..	..	..
	Fuel	..	..	..	..	..	..	..	..
	Bamboos	..	..	..	..	..	..	..	..
	Minor produce.	..	..	..	..	..	..	..	..
Chittoor	Timber	..	* 17	95	..	81	13	..	82
	Fuel	..	2,601	210	..	..	..	..	210
	Bamboos	..	..	..	..	..	..	..	..
	Minor produce.	397	..	853	45	..	28	..	825
	Southern Circle.			Rs.					
Vellore, North.	Timber	..	..	..	..	1	1	1	..
	Fuel	..	10,886	555	..	838	73	..	482
	Minor produce	MDS. 68	..	1	..	..	..	..	1
Vellore, South.	Timber	..	2,318	27,552	..	4,553	75,776	48,224	..
	Fuel	..	533	29	..	807	50	21	..
	Minor produce	..	..	..	MDS. 3	..	12	12	..
Arcot, South	....	..	..	..	..	..	..	..	..
Salem, North.	Timber	..	1,240	459	..	93	850	391	..
	Fuel	..	..	..	..	..	..	..	..
	Minor produce	MDS. 40	..	4	..	..	..	..	4
Salem, South.	Timber	..	285	402	..	440	524	122	..
	Fuel	..	..	..	..	..	..	..	..
	Minor produce	MDS. 340	..	15	..	..	..	..	15
Trichinopoly	Timber	..	13	3	..	† 13	406	403	..
	Fuel	..	..	..	..	311	36	36	..
	Minor produce	..	..	..	MDS. 7	..	1	1	..
Madura	Timber	..	27	7	..	1,061	398	391	..
	Fuel	..	100	6	..	240	15	9	..
	Minor produce	..	..	..	MDS. 7	..	19	19	..
Tinnevelly	Timber	..	4,949	549	..	142	188	..	361
	Fuel	..	6,918	103	..	1,016	56	..	47
	Bamboos	..	..	..	(*b*) 459	..	..	..	..
	Minor produce	MDS. 57	..	160	MDS. (*a*)	..	4	..	156

* Revised figure as per correct factor of conversion. † Sandalwood.

(*a*) Less than half a maund. (*b*) Valueless being rotten. Since written off.

Statement showing the value of Timber and other Produce at Sale depots for 1913-14—*cont.*

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.	
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.
1	2	3	4	5	6	7	8	9	10
	Western Circle.			RS.			RS.	RS.	RS.
South Canara.	Timber	..	986	619	..	1,190	1,287	668	..
	Fuel	..	98,055	11,979	..	1,70,971	17,423	5,444	..
	Bamboos	812	..	89	449	..	49	..	40
North Malabar.	Timber	..	21,948	10,949	..	18,877	20,913	9,964	..
	Fuel	..	4,139	284	..	11,520	792	508	..
	Bamboos ..	5,427	..	486	3,565	..	321	..	165
	Minor produce ..	QRS. * ..	..	24	..	..	..	..	24
The Nilgiris.	Timber	..	3,470	1,396	..	847	256	..	1,140
	Fuel	..	27,479	2,196	..	53,291	4,260	2,064	..
Kollegal ..	Timber	..	1,850	913	..	428	285	..	628
	Fuel	..	920	43	..	240	5	..	38
	Bamboos	6,718	..	265	14,865	..	1,345	1,080	..
	Minor produce ..	QRS. 169	..	576	QRS. 1,412	..	2,190	1,614	..
North Coimbatore.	Timber	..	64	53	..	1,253	23,422	23,369	..
	Minor produce ..	QRS. 180	..	706	QRS. 2,841	..	3,944	3,238	..
Central Coimbatore.	Fuel	..	397	32	..	..	..	..	32
	Minor produce ..	QRS. 27	..	7	..	..	..	..	7
South Coimbatore.	Timber	..	120,952	1,81,191	..	69,624	86,028	..	95,163
	Fuel	..	27,720	486	..	43,720	897	411	..
	Minor produce ..	QRS. 236	..	588	QRS. 3	..	1	..	587

ABSTRACT.

Northern Circle.	Timber	..	23,225	15,539	..	15,842	11,442	..	4,097
	Fuel	..	201,468	7,646	..	341,342	15,824	8,178	..
	Bamboos ..	25,218	..	554	2,297	..	18	..	536
	Minor produce ..	MDS. 686	..	1,757	MDS. 619	..	2,079	322	..
	Total value ..	..	..	25,496	..	..	29,363	3,867	..
Central Circle.	Timber	..	4,884	4,585	..	875	807	..	3,778
	Fuel	..	15,506	760	..	12,075	264	..	496
	Bamboos	..	..	..	..	..	..	..	..
	Minor produce ..	5,361	..	2,811	7,575	..	1,973	..	838
	Total value ..	..	..	8,156	..	..	3,044	..	5,112
Southern Circle.	Timber	..	8,832	28,972	..	6,303	78,143	49,171	..
	Fuel	..	18,437	693	..	3,212	230	..	463
	Bamboos ..	..	..	..	459	..	..	..	..
	Minor produce ..	MDS. 505	..	180	MDS. 17	..	36	..	144
	Total value ..	..	..	29,845	..	..	78,409	48,564	..
Western Circle.	Timber ..	..	149,270	1,95,121	..	92,219	1,32,191	..	62,930
	Fuel	..	158,710	15,020	..	2,79,742	23,377	8,357	..
	Bamboos ..	12,957	..	840	18,879	..	1,715	875	..
	Minor produce ..	QRS 612	..	1,901	QRS. 4,256	..	6,135	4,234	..
	Total value ..	..	..	2,12,882	..	..	1,63,418	..	49,464
Total, Presidency.	Timber	..	..	2,44,217	..	..	2,22,583	..	..
	Fuel	..	..	24,119	..	..	39,695	..	..
	Bamboos ..	..	..	1,394	..	..	1,733		..
	Minor produce ..	..	..	6,649	..	..	10,223	..	..
	Grand Total Presidency.	..	..	2,76,379	..	..	2,74,234	..	2,145

* Less than one quarter.

ANNUAL FORM No. 80.

Forest Department, Madras Presidency.

SUMMARY of Revenue of the different districts for the Forest year 1913–14.

ANNUAL

Forest Department,

SUMMARY of Revenue of the different districts

Budget heads.	Northern Circle.						
	Direction.	Ganjām.	Vizaga-patam.	Gōdāvari, Upper.	Gōdāvari, Lower.	Kistna.	Kurnool, East.
1	2	3	4	5	6	7	8
Receipts.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Timber and other produce removed from the forests by Government Agency—							
(*a*) Timber	53	21,026	134	787	369	..	3,180
(*b*) Firewood and charcoal	68	2,044	6,151	33	4,136	236	41
(*c*) Bamboos	..	1,095	970	..	..	..	5
(*d*) Sandalwood	..	..	..	..	..	..	..
(*e*) Grass and other minor produce. ..	792	1,622	534	..	..	667	866
II. Timber and other produce removed from the forests by consumers or purchasers—							
(*a*) Timber	..	31,637	5,889	30,166	45,184	10,584	16,227
(*b*) Firewood and charcoal.	..	13,162	1,100	883	33,358	32,889	1,839
(*c*) Bamboos	..	4,275	8,919	8,025	37,967	4,191	2,510
(*d*) Grazing and fodder grass.	..	11,669	5,874	8,627	13,101	18,560	32,931
(*e*) Other produce	1,588	3,473	14,172	836	33,470	10,123	1,616
(*f*) Tree-owner's fees.	..	1,775	480	..	5,157	11,212	1,424
(*g*) Other items	..	..	..	..	.	..	..
(*h*) Commutation fees	..	..	..	2,027	..	..	..
III. Confiscated drift and waifwood.	..	295	55	960	5,691	60	159
IV. Revenue from forest not managed by Government.	.	..	..	..	..	..	..
V. Miscellaneous—							
(*a*) Fines and forfeitures	..	3,314	1,311	391	4,603	3,587	4,910
(*b*) Other sources	1	2,539	880	482	6,973	848	648
Total, Receipts ..	2,502	97,926	46,469	53,227	1,90,009	92,957	66,356

Budget heads.	Southern Circle.						
	Direction.	Vellore, North.	Vellore, South.	Arcot, South.	Salem, North.	Salem, South.	Trichino-poly *cum* Tanjore.
	22	23	24	25	26	27	28
Receipts.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Timber and other produce removed from the forests by Government Agency—							
(*a*) Timber	..	67	1,333	..	3,688	780	1
(*b*) Firewood and charcoal	..	188	173	207	..	62	1,197
(*c*) Bamboos	..	..	..	172	..	..	66
(*d*) Sandalwood	26	35	69,259	..	11,822	4,930	..
(*e*) Grass and other minor produce ..	..	28	4	.	4	30	148
II. Timber and other produce removed from the forests by consumers or purchasers—							
(*a*) Timber	.	15,507	14,366	15,513	8,563	9,105	12,514
(*b*) Firewood and charcoal	..	35,331	14,267	1,27,106	10,340	18,846	91,588
(*c*) Bamboos	..	15,902	35,696	390	19,508	32,514	5,355
(*d*) Grazing and fodder grass	..	25,658	28,661	30,264	33,991	21,520	27,928
(*e*) Other produce	700	31,326	21,266	29,215	13,811	39,493	32,218
(*f*) Rents for trees tapped	..	5,267	1,422	2,004	1,189	190	173
(*g*) Other items	..	..	..	38	759	..	..
(*h*) Commutation	..	..	..	..	..	45	..
III. Confiscated drift and waifwood	..	49	268	296	181	119	167
IV. Revenue from forest not managed by Government—							
(*a*) Revenue from shared and private forests.	..	..	..	..	..	..	..
V. Miscellaneous—							
(*a*) Fines and forfeitures	..	17,568	9,789	19,156	6,952	8,006	14,629
(*b*) Other sources	53	1,064	957	1,290	4,156	6,723	1,141
Total, Receipts ..	779	1,47,990	1,97,461	2,25,651	1,14,964	1,42,363	1,87,125

NOTE (*Southern Circle*).—The revenue under "Direction" is distributed as follows:—

I. (*d*) North Salem, Rs. 26.

II. (*e*) North Vellore, Rs. 700 ; V (*b*) Direction, Rs. 14 ; North Vellore, Rs. 10 ; South Vellore, Rs. 7 ; Trichinopoly, Rs. 5, 10 and Madura, Rs. 12.

FORM No. 80.

Madras Presidency.

for the Forest year 1913–14.

Circle.			Central Circle.									
Kurnool, South.	Kurnool, West.	Total.	Direction	Guntūr.	Nellore.	Cuddapah, West.	Cuddapah, East.	Bellary.	Anantapur.	Chittoor.	Chingleput.	Total.
9	10	11	12	13	14	15	16	17	18	19	20	21
RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
15,579	28,659	69,787	..	264	199	1,595	3,984	548	..	182	2	6,774
20,947	14,365	48,021	..	3,180	372	569	938	377	217	5,332	92	11,077
1,721	6,356	10,147	..	..	..	..	132	15	..	46	..	193
..	..	..	..	..	..	..	..	1,008	..	88	..	1,096
807	1,877	7,165	..	2,948	10,636	241	5,068	1	11	975	19	19,899
3,064	502	1,43,253	..	21,470	8,511	4,218	9,218	20,121	17,139	7,380	14,962	1,03,019
11,692	8,543	1,03,466		27,017	87,157	8,227	14,839	15,958	3,215	12,100	15,984	1,84,497
14,686	8,476	89,049	..	..	..	3,194	5,304	39	..	5,540	42	14,119
9,998	23,982	1,24,742	..	73,371	49,178	16,682	18,947	46,012	30,357	21,904	14,480	2,70,931
6,302	16,922	88,502	..	22,985	53,660	14,734	9,331	68,777	1,37,498	42,152	15,499	3,64,636
2,618	14,466	37,132	..	5,161	2,800	1,934	1,935	24,498	10,704	3,313	4,279	54,624
..	..		..	..	..	..	233	..	..	..	..	233
..	..	2,037	..	..	..	..	..	..	..	..	..	..
1,946	748	9,914	..	224	1,141	205	1,107	225	262	36	25	3,225
4,152	8,004	30,272	..	18,792	11,592	6,557	6,190	11,005	8,341	6,929	5,285	74,691
1,776	1,339	15,486	256	2,400	10,756	163	798	1,115	263	961	1,065	17,777
95,288	1,34,239	7,78,973	256	1,77,812	2,36,002	58,319	78,024	1,89,699	2,08,007	1,06,938	71,734	11,26,791

				Western Circle.									
Madura.	Tinnevelly *cum* Rāmnād.	Working plans officer, Southern Circle.	Total.	Direction	South Canara.	North Malabar.	South Malabar.	The Nilgiris.	Kollegal.	North Coimbatore.	Central Coimbatore.	South Coimbatore.	Total.
29	30	31	32	33	34	35	36	37	38	39	40	41	42
RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
124	187	..	6,180	..	3,256	13,919	76,949	15,106	795	1,053	246	80,092	1,91,416
41	602	..	2,470	..	27,017	144	198	32,108	4,607	15,719	3,568	1,107	84,468
..	46	..	284	..	2,094	1,839	3,949	..	1,799	..	..	..	9,681
..	..	..	86,072	..	..	..	..	4,069	..	61,133	5	.	65,207
145	242	..	601	1	13,531	19	146	372	1,296	5,445	100	1,812	22,722
7,954	3,749	..	87,271	..	12,868	24,709	1,478	1,705	2,322	4,116	9,225	2,689	59,112
60,010	85,233	..	4,42,721	..	19,920	1	16	2,536	485	7,046	24,320	6,386	60,710
2,824	591	..	1,12,780	..	510	198	936	3,255	800	14,718	6,037	1,810	28,264
29,417	7,614	..	2,05,053	..	11,523	2,636	3	9,514	20,315	27,383	7,114	2,679	81,167
30,059	31,593	..	2,29,681		28,341	5,098	2,727	1,603	3,541	6,465	9,440	4,069	61,284
6	..	..	10,251	..	2,152	..	..	..	30	..	8	7	2,197
..	..	..	797	..	..	..	..	..	..	..	..	..	..
..	..	..	45	..	..	..	..	..	..	..	..	..	..
714	1,127	..	2,921	..	2,792	14	1 709	30	237	185	721	276	5,964
..	..	..	..	..	..	..	..	..	..	..	..	..	..
12,097	7,115	..	95,312	1,150	23,663	235	45	755	2,941	3,624	5,201	3,522	41,136
1,323	2,197	..	18,904	66,932	12.411	12,467	13,749	8,039	1.787	2,346	3,061	7,615	1,28,407
1,44,714	1,40,296	..	13,01,343	68,083	1,60,078	61,279	1,01,905	79,092	40,955	1,49,233	69,046	1,12,064	8,41,735

NOTE (*Central Circle*).—The revenue realized in the Madras Bank and credited under "Direction" has been distributed to the districts concerned.

NOTE (*Western Circle*).—The revenue under "Direction" is distributed as follows :—

V (*a*) relates to *South Coimbatore*.

V (*b*) *South Malabar*, Rs. 6,725 ; *The Nilgiris*, Rs. 14,230 ; *Kollegal*, Rs. 8 ; *North Coimbatore*, Rs. 2 ; *South Coimbatore*, Rs. 45,691 ; *Direction*, Rs. 276.

North Malabar.—The revenue under II (*d*) includes Rs. 44 erroneously credited to that head instead of to II (*e*).

South Malabar.—V (*b*) The amount includes Rs. 2,775 and Rs. 2,750 relating to *The Nilgiris* and *South Coimbatore*, respectively.

North Coimbatore.—The revenue under I (*d*) includes Rs. 22,632 realised on account of *Kollegal*.

ACCOUNTANT-GENERAL'S OFFICE,
MADRAS, 1*st September* 1914.

H. BHIMASENA RAO,
Deputy Accountant-General.

Summary of Expenditure of the different districts for the Forest year 1913–14.

Budget heads.	Direction.	Ganjám.	Vizagapatam.	Gódávari, Upper.	Gódávari, Lower.	Kistna.	Kurnool, East.	Kurnool, South.	Kurnool, West.	Total.
NORTHERN CIRCLE.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Refunds and Drawbacks ..	..	2,745	13	346	647	3,975	113	329	162	8,328
A. "Conservancy and Works."										
Timber, etc., removed from the forest by Government Agency—										
(*a*) Timber	5	8,095	41	..	..	..	136	6,213	11,382	25,872
(*b*) Firewood and charcoal ..	9	1,328	2,986	..	510	334	..	15,612	7,660	28,459
(*c*) Bamboos	..	858	472	..	..	..	..	815	2,881	5,026
(*d*) Sandalwood ..	..	..	..	..	..		..	..	..	..
(*e*) Grass and other minor produce..	..	1,030	93	..	16	223	4,493	316	1,706	7,877
II. Timber, etc., removed from the forests by consumers, etc.	..	6,266	4,964	3,630	12,245	2,267	6,729	6,989	11,146	54,236
III. Confiscated drift and waifwood	..	85	—3	..	1,477	3	7	209	26	1,804
V. Rent of leased forests and payments to shareholders in forests managed by Government	..	..	474	..	..	.	..	..	..	474
VI. Live-stock, stores, etc.—										
(*a*) Purchase of cattle.	..		..	.	..	..	43	..	..	43
(*b*) Feed and keep of cattle	..	2,108	1,013	941	..	..	74	2,287	1,604	8,027
(*c*) Stores, tools and plant	170	341	100	1,173	7,793	1,109	719	807	272	12,484
VII. Communications and buildings—										
(*a*) Roads and bridges	..	5,936	641	987	1,431	3,892	12,177	5,153	1,371	31,588
(*b*) Buildings ..	..	7,937	2,055	6,361	7,003	649	12,083	6,530	1,171	43,789
(*c*) Other works ..	..	407	187	1,246	1,289	1,798	637	2,584	721	8,869
VIII. Demarcation, improvement and extension of forests—										
(*a*) Demarcation ..	..	999	96	842	1,292	1,113	3,685	444	40	8,511
(*b*) Cost of forest settlement; compensation for land and rights.	..	..	1	..	..	..	..	..	..	1
(*c*) Surveys—										
(1) Local ..	159	1,198	..	2,718	761	972	1,069	2,673	1,030	10,580
(2) India ..	7	..	..	..	..	..	..	..	..	7
(*d*) Working plans ..	..	..	..	..	..	..	..	..	..	..
(*e*) Sowing and planting	1,844	448	27	55	2,997	3,046	2,467	1,580	34,183	46,647
(*f*) Protection from fire	..	4,326	2,062	1,406	5,078	1,511	13,900	16,842	9,409	54,534
(*g*) Other works ..	..	118	5	..	1,745	7,363	847	1,504	3,290	14,872
X. Miscellaneous—										
(*a*) Law charges ..	..	..	..	..	..	..	..	..	1	1
(*b*) Other charges ..	185	463	2	229	13	..	..	10	463	1,365
Total, A. "Conservancy and Works"	2,379	41,943	15,216	19,588	43,650	24,280	59,066	70,568	88,376	3,65,066
B. "Establishments."										
I. Salaries—										
(*a*) Conservators	22,800	..	..	..	..	..	..	..	..	22,800
(*b*) Superior officers ..	1,028	10,633	10,542	6,477	8,641	6,187	6,404	6,525	13,177	69,614
(*c*) Subordinate Forest and Depot establishments.	..	20,506	6,382	13,322	13,266	8,589	13,392	22,150	21,716	1,19,323
(*d*) Office establishments.	9,839	6,953	—2,525	4,921	5,923	3,835	5,586	6,320	8,107	48,961
(*e*) Deputation and special allowances ..	..	..	..	..	..	..	..	..	..	..
II. Travelling allowances—										
(*a*) Conservators	4,429	..	..	..	..	..	..	..	..	4,429
(*b*) Superior officers	20	1,638	1,028	1,038	1,238	1,399	1,947	2,185	2,538	13,031
(*c*) Subordinate Forest and Depot establishments	152	5,277	1,731	4,188	4,689	2,705	4,665	7,207	6,322	36,936
(*d*) Office establishments.	1,253	2,090	— 879	1,279	1,189	919	1,499	1,764	1,418	10,532

Summary of Expenditure of the different districts for the Forest year 1913-14—*cont.*

Budget heads.	Direction.	Ganjam.	Vizagapatam.	Godavari, Upper.	Godavari, Lower.	Kistna.	Kurnool, East.	Kurnool, South.	Kurnool, West.	Total.
NORTHERN CIRCLE—*cont.*	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
B. "*Establishment*"—cont.										
III. Contingencies—										
(*a*) Rents, rates and taxes.	136	80	125	..	227	300	234	608	180	1,890
(*b*) Official postage and service telegrams ..	1,117	1,289	584	951	1,572	1,190	823	1,104	1,292	9,922
(*c*) Telephone charges ..	..	..	..	..	..	..	..	..	..	..
(*d*) Sundries	6,980	1,983	1,108	1,249	4,141	1,401	1,932	2,057	2,232	23,083
Total, B. "Establishment" ..	47,754	50,449	18,096	33,425	40,886	26,525	36,484	49,920	56,982	3,60,521
Grand Total of Expenditure A and B.	50,133	92,392	33,312	53,013	84,536	50,805	95,550	1,20,488	1,45,358	7,25,587

Budget heads.	Direction.	Guntur.	Nellore.	Cuddapah, West.	Cuddapah, East.	Bellary.	Anantapur.	Chittoor.	Chingleput.	Total.
CENTRAL CIRCLE.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Refunds and Drawbacks.	120	357	4,087	1,365	560	213	1,440	467	1,799	10,908
A. " *Conservancy and Works.*"										
I. Timber, etc., removed from the forest by Government Agency—										
(*a*) Timber ..	..	..	..	185	347	53	18	1	..	604
(*b*) Firewood and charcoal.	..	1,136	— 31	820	1,529	196	221	1,028	740	5,639
(*c*) Bamboos ..	..	..	..	..	70	..	..	..	..	70
(*d*) Sandalwood ..	..	..	..	..	..	235	..	..	..	235
(*e*) Grass and other minor produce.	..	2,448	3,618	10	4,680	..	..	74	..	10,830
II. Timber, etc., removed from the forests by consumers, etc.	..	6,748	3,275	5,342	8,989	2,655	1,767	1,948	3,292	34,016
III. Confiscated drift and waifwood.	..	4	15	9	24	3	..	..	223	278
IV. Forests not managed by Government—										
(*a*) Shared and private forests.	..	..	..	..	.	..	..	..	..	..
V. Rent of leased forests and payments to shareholders in forests managed by Government.	..	..	..	..	..	8,000	..	..	..	8,000
VI. Live-stock, stores, tools and plant—										
(*a*) Purchase of cattle.	..	..	47	..	..	..	..	..	..	47
(*b*) Feed and keep of cattle.	..	4	27	..	..	— 4	..	..	..	27
(*c*) Stores, tools and plant.	489	1,177	3,730	497	269	298	704	493	600	8,257
VII. Communications and buildings—										
(*a*) Roads and bridges.	..	7	183	208	5,698	559	2,191	2,488	430	11,764
(*b*) Buildings ..	..	1,767	4,102	2,008	6,338	9,392	5,792	7,044	679	37,122
(*c*) Other works ..	..	306	..	57	283	989	1,580	599	71	3,947
VIII. Demarcation, improvement and extension of forests—										
(*a*) Demarcation ..	..	1,575	726	499	1,259	786	1,855	2,169	126	8,995
(*b*) Cost of forest settlement; compensation for land and rights.	..	..	144	69	..	271	15	80	9	588

Summary of Expenditure of the different districts for the Forest year 1913-14—*cont.*

Budget heads.	Direction.	Guntur.	Nellore.	Cuddapah, West.	Cuddapah, East.	Bellary.	Anantapur.	Chittoor.	Chingleput.	Total.
CENTRAL CIRCLE—*cont.*	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
A. "*Conservancy and works*" —cont.										
VIII, Demarcation, improvement and extension of forests—*cont.*										
(*c*) Surveys—										
(1) Local ..	845	414	1,415	544	737	1,117	967	480	301	6,820
(2) India ..	..	..	..	..	..	..	..	..	..	..
(*d*) Working plans ..	..	..	..	..	..	..	..	..	..	..
(*e*) Sowing and planting.	..	4,720	10,852	13	546	6,642	330	1,017	1,495	25,615
(*f*) Protection from fire.	..	399	1,390	4,860	6,726	6,191	6,525	1,509	954	28,554
(*g*) Other works ..	..	10,553	9,062	4,652	2,688	13,167	10,889	12,943	12,029	75,984
IX. Miscellaneous—										
(*a*) Law charges ..	..	..	45	..	..	..	335	..	..	380
(*b*) Other charges ..	30	139	20	11	413	10	503	33	15	1,174
Total, A. "Conservancy and Works."	1,364	31,397	38,683	19,784	40,596	50,560	33,692	31,906	20,964	2,68,946
B. "*Establishment.*"										
I. Salaries—										
(*a*) Conservators	18,000	..	..	..	..	..	..	..	..	18,000
(*b*) Superior officers ..	1,028	7,587	14,694	3,200	11,522	11,189	15,500	16,077	5,204	86,001
(*c*) Subordinate Forest and Depot establishments.	1,192	13,427	17,483	9,133	15,474	21,849	16,517	14,600	8,175	1,17,850
(*d*) Office establishments ..	9,437	6,171	12,269	4,489	6,007	7,062	5,140	5,276	3,776	59,627
(*e*) Deputation and special allowances.	..	..	..	..	..	..	..	..	..	..
(*f*) Exchange compensation allowances.	..	..	..	..	..	..	..	..	..	..
II. Travelling allowances—										
(*a*) Conservators ..	3,547	..	..	..	..	..	..	..	..	3,547
(*b*) Superior officers ..	20	981	1,408	727	1,988	1,405	1,323	1,413	1,190	10,455
(*c*) Subordinate Forest and Depot establishments.	7	4,136	4,600	2,955	4,302	5,767	5,671	3,970	2,385	33,793
(*d*) Office establishments.	987	1,305	2,513	686	956	1,579	1,776	822	885	11,509
III. Contingencies—										
(*a*) Rents, rates and taxes.	..	177	79	72	136	718	143	176	51	1,552
(*b*) Service postage and telegrams.	792	1,594	1,895	976	1,069	1,439	1,308	1,176	866	11,115
(*c*) Sundries	6,259	1,506	1,396	1,175	1,802	2,841	3,389	1,304	724	20,396
Total B. "Establishment".	41,269	36,884	56,337	23,413	43,256	53,849	50,767	44,814	23,256	3,73,845
Grand Total of Expenditure A and B.	42,633	68,281	95,020	43,197	83,852	1,04,409	84,459	76,720	44,220	6,42,791

Budget heads.	Direction.	Vellore, North.	Vellore, South.	Arcot, South.	Salem, North.	Salem, South.	Trichinopoly *cum* Tanjore.	Madura.	Tinnevelly *cum* Rámnád.	Working plans officer, Southern Circle.	Total.
SOUTHERN CIRCLE.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Refunds and Drawbacks.	..	1,804	1,176	981	800	996	3,076	2,864	2,104	..	13,801
"*A. Conservancy and Works.*"											
I. Timber and other produce removed from the forests by Government Agency—											
(*a*) Timber ..	..	2	87	..	898	601	..	..	..	..	1,588
(*b*) Firewood and charcoal.	..	..	276	141	8	26	606	19	12	..	1,088
(*c*) Bamboos ..	..	..	..	75	..	..	..	..	..	..	75
(*d*) Sandalwood ..	..	7	5,644	..	853	274	47			..	6,825
(*e*) Grass and other minor produce.	..	4	..	..	..	..	..	..	45	..	49

Summary of Expenditure of the different districts for the Forest year 1913-14—*cont*

Budget heads.	Direction.	Vellore, North.	Vellore, South.	Arcot, South.	Salem, North.	Salem, South.	Trichinopoly *cum* Tanjore.	Madura.	Tinnevelly *cum* Ramnad.	Working plans officer, Southern Circle.	Total.
SOUTHERN CIRCLE—*cont.*	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
A. "*Conservancy and Works*" —cont.											
II. Timber and other produce removed from the forests by consumers or purchasers.	..	2,325	2,279	2,210	1,838	4,451	4,126	3,204	2,866	..	23,299
III. Confiscated drift and waifwood.	..	..	..	..	8	6	10	318	252	..	594
V. Rent of leased forests and payments to shareholders in forests managed by Government.	..	..	..	..	8	..	..	..	..	..	8
VI. Live-stock, stores, tools and plant—											
(*a*) Purchase of cattle.	..	..	..	..	..	..	..	..	..	..	..
(*b*) Feed and keep of cattle.	..	48	..	..	39	..	..	..	..	..	87
(*c*) Stores, tools and plant.	463	416	344	506	184	1,019	418	43	780	12	4,185
VII. Communications and buildings—											
(*a*) Roads and bridges.	..	6,884	5,948	951	6,477	5,935	2,106	10,304	2,515	..	41,120
(*b*) Buildings ..	..	3,570	7,189	5,699	12,810	6,653	5,517	10,778	4,587	..	56,803
(*c*) Other works ..	..	660	1,377	312	1,526	1,131	86	441	564	..	6,097
VIII. Demarcation, improvement and extension of forests—											
(*a*) Demarcation ..	..	..	139	157	117	857	..	4,118	742	..	6,13
(*b*) Cost of forest settlement; compensation for land and rights.	..	152	5	..	..	278	..	1,786	280	..	2,50
(*c*) Surveys { Local.	600	118	590	365	1,285	1,267	615	1,598	664	..	7,102
(*c*) Surveys { India.	..	..	..	..	..	..	..	..	..	..	..
(*d*) Working plans.	..	..	..	..	..	..	..	..	..	3,095	3,095
(*e*) Sowing and planting.	..	2,539	174	1,422	723	430	3,084	8,437	1,057	..	17,866
(*f*) Protection from fire.	..	565	1,960	235	3,105	3,337	852	4,581	5,042	..	19,677
(*g*) Other works ..	..	7,775	8,167	8,177	6,809	6,229	10,456	13,076	5,972	..	66,661
IX. Miscellaneous—											
(*a*) Law charges ..	..	..	..	..	..	31	19	62	..	..	112
(*b*) Other charges ..	..	63	89	..	127	3	145	59	448	55	989
Total, A. "Conservancy and Works".	1,063	25,128	34,268	20,250	36,315	32,528	28,087	58,824	25,826	3,162	2,65,951
B. "*Establishment.*"											
I. Salaries—											
(*a*) Conservators ..	20,445	..	..	..	..	..	..	..	..	..	20,445
(*b*) Superior officers ..	1,028	6,600	10,051	4,214	17,780	6,488	13,207	23,085	15,028	4,046	1,01,527
(*c*) Subordinate Forest and Depot establishments.	645	9,781	14,426	10,831	12,482	13,283	15,242	18,523	15,404	982	1,11,599
(*d*) Office establishments.	8,256	3,491	5,700	5,020	6,339	5,426	7,117	6,548	5,294	373	53,564
II. Travelling allowances—											
(*a*) Conservators ..	2,194	..	..	..	..	..	..	..	..	..	2,194
(*b*) Superior officers ..	20	1,107	2,529	1,483	2,325	1,226	1,185	2,863	1,363	1,184	15,285
(*c*) Subordinate Forest and Depot establishments.	127	2,856	3,599	3,376	4,720	3,496	4,351	5,570	3,431	519	32,045
(*d*) Office establishments.	744	534	1,217	789	1,139	560	1,135	1,421	1,265	196	9,000
III. Contingencies—											
(*a*) Rents, Rates and taxes.	..	68	135	174	219	32	143	224	212	..	1,207
(*b*) Service postage and telegrams	652	1,206	1,316	1,730	1,585	937	1,903	1,550	1,157	170	12,206
(*c*) Telephone charges.	..	..	..	..	..	..	..	..	..	..	..
(*d*) Sundries	7,163	727	1,522	999	1,931	1,645	888	2,692	807	501	18,875
Total, B. "Establishment."	41,274	26,370	40,495	28,616	48,520	33,093	45,171	62,476	43,961	7,971	3,77,947
Grand Total of Expenditure A and B.	42,337	51,498	74,763	48,866	85,335	65,621	73,258	1,21,300	69,787	11,133	6,43,898

Summary of Expenditure of the different districts for the Forest year 1913–14—*cont.*

Budget heads.	Direction.	South Canara.	North Malabar.	South Malabar.	The Nilgiris.	Kollegal.	North Coimbatore.	Central Coimbatore.	South Coimbatore.	Total.
WESTERN CIRCLE.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Refunds and Drawbacks.	3,588	2,405	66	9	193	414	3,342	478	282	10,777
A. "Conservancy and Works."										
I. Timber, etc., removed from the forests by Government Agency—										
(*a*) Timber	..	1,696	6,259	9,122	1,272	157	194	1	9,700	28,401
(*b*) Firewood and charcoal.	..	20,163	542	..	23,171	3,796	7,783	1,409	1,586	58,450
(*c*) Bamboos	..	916	944	2,003	..	1,442	..	96	..	5,401
(*d*) Sandalwood ..	79	1,649	..	..	248	2,787	3,775	..	..	8,538
(*e*) Grass and other minor produce.	..	3,075	..	..	181	1,854	4,269	202	1,207	10,788
II. Timber, etc., removed from the forests by consumers, etc.	..	6,835	499	..	953	1,637	2,594	3,396	1,984	17,898
III. Confiscated drift and waifwood.	..	112	..	..	..	2	1	21	9	145
V. Rent of leased forests and payments to shareholders in forests managed by Government.	..	..	50	1,054	4,535	..	..	..	2,500	8,139
VI. Live-stock, stores, etc.—										
(*a*) Purchase of cattle.	..	..	2,447	1,265	4,469	..	..	..	1,393	9,574
(*b*) Feed and keep of cattle.	..	1,729	12,146	17,017	21,696	..	..	133	17,921	70,642
(*c*) Stores, tools and plant.	225	897	1,480	776	2,015	414	115	306	1,705	7,937
VII. Communications and buildings—										
(*a*) Roads and bridges.	..	1,361	4,461	4,679	8,277	5,619	10,633	2,084	8,137	45,251
(*b*) Buildings	..	1,528	6,564	5,094	5,582	5,172	6,928	4,548	4,474	39,890
(*c*) Other works ..	..	71	3,628	2,371	939	1,547	1,196	166	280	10,198
VIII. Demarcation, improvement and extension of forests—										
(*a*) Demarcation ..	..	1,002	487	178	441	1,127	1,486	29	43	4,793
(*b*) Cost of Forest Settlement; compensation for land and rights.	6,500	..	1,378	..	..	170	6,984	218	410	15,660
(*c*) Surveys { Local.	..	405	380	622	483	1,251	518	664	1,272	5,595
(*c*) Surveys { India.	..	..	..	..	..	..	..	..	..	..
(*d*) Working plans ..	..	17	7	14	..	..	..	66	..	104
(*e*) Sowing and planting.	567	58	2,129	5,229	2,247	102	198	708	1,681	12,919
(*f*) Protection from fire.	..	4,617	7,556	2,858	4,082	2,976	3,309	3,401	2,705	31,504
(*g*) Other works ..	..	998	1,987	1,644	1,169	2,890	4,727	4,673	1,424	19,512
IX. Miscellaneous—										
(*a*) Law charges ..	..	10	..	..	..	..	..	3	..	13
(*b*) Other charges ..	220	79	722	47	5,001	367	441	209	245	7,331
Total, A. "Conservancy and Works."	7,595	47,218	53,666	53,973	86,761	33,310	55,151	22,333	58,676	4,18,683
B. "Establishment."										
I. Salaries—										
(*a*) Conservators	24,812	..	..	..	..	..	..	..	..	24,812
(*b*) Superior officers ..	1,118	4,810	16,190	7,704	22,658	3,592	16,319	4,694	18,509	95,594
(*c*) Subordinate Forest and Depot establishments.	3,040	20,658	15,214	6,892	18,869	8,678	13,556	9,453	10,267	1,06,627
(*d*) Office establishments ..	10,114	7,060	6,483	5,168	6,756	3,987	5,867	4,425	6,092	55,952
II. Travelling allowances—										
(*a*) Conservators	1,925	..	..	..	..	..	..	..	..	1,925
(*b*) Superior officers ..	20	1,140	1,120	2,352	2,508	1,960	2,692	1,150	2,881	15,823
(*c*) Subordinate Forest and Depot establishments.	194	5,711	3,619	2,414	3,990	1,801	3,645	2,541	2,226	26,141
(*d*) Office establishments ..	533	1,370	1,042	693	679	524	875	949	905	7,570
III. Contingencies—										
(*a*) Rents, rates and taxes.	69	120	125	16	1,381	616	44	38	122	2,531
(*b*) Official postage and service telegrams.	449	1,711	589	568	610	445	912	491	931	6,706
(*c*) Telephone charges ..	..	..	..	..	..	..	..	..	699	699
(*d*) Sundries	8,382	1,801	1,995	1,065	1,504	2,105	1,759	1,148	2,030	21,789
Total, B. "Establishment."	50,656	44,381	46,377	26,872	58,955	23,708	45,669	24,889	44,662	3,66,169
Grand Total of Expenditure A and B	58,251	91,599	1,00,043	80,845	1,45,716	57,018	1,00,820	47,222	1,03,338	7,84,852

ACCOUNTANT-GENERAL'S OFFICE,
MADRAS, 1*st September* 1914.

H. BHIMASENA RAO,
Deputy Accountant-General.

SUMMARY of receipts and expenditure during 1913-14 for each Circle and for the Presidency compiled in the Board's office from Accountant-General's statements.

Budget heads.	Northern Circle.	Central Circle.	Southern Circle.	Western Circle.	Grand total, Presidency.	
					1913-14.	1912-13.
1	2	3	4	5	6	7
RECEIPTS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Timber and other produce removed from the forests by Government Agency—						
(a) Timber	69,787	6,774	6,180	1,91,416	2,74,157	3,43,502
(b) Firewood and charcoal ..	48,021	11,077	2,470	84,468	1,46,036	2,78,738
(c) Bamboos	10,147	193	284	9,661	20,305	56,444
(d) Sandalwood..	..	1,096	86,072	65,207	1,52,375	2,71,870
(e) Grass and other minor produce.	7,165	19,899	601	22,722	50,287	54,405
Total, I ..	1,35,120	39,039	95,607	3,73,494	6,43,260	10,04,959
II. Timber and other produce removed from the forests by consumers, etc.—						
(a) Timber	1,43,253	1,03,019	87,271	59,112	3,92,655	3,51,266
(b) Firewood and charcoal ..	1,03,466	1,84,497	4,42,721	60,710	7,91,394	6,67,992
(c) Bamboos	89,049	14,119	1,12,780	28,264	2,44,212	2,05,704
(d) Grazing and fodder grass..	1,24,742	2,70,931	2,05,053	81,167	6,81,893	6,91,509
(e) Other produce	88,502	3,64,636	2,29,681	61,284	7,44,103	6,53,492
(f) Tree-owners' fees	37,132	54,624	10,251	2,197	1,04,204	1,07,814
(g) Other items	..	233	797	..	1,030	1,178
(h) Commutation fees	2,037	..	45	..	2,082	2,222
Total, II ..	5,88,181	9,92,059	10,88,599	2,92,734	29,61,573	26,81,177
III. Confiscated drift and waifwood ..	9,914	3,225	2,921	5,964	22,024	18,185
IV. Revenue from forests not managed by Government.	..	..	..	..	..	..
V. Miscellaneous—						
(a) Fines and forfeitures ..	30,272	74,691	95,312	41,136	2,41,411	2,27,432
(b) Other sources	15,486	17,777	18,904	1,28,407	1,80,574	1,87,018
Total, V ..	45,758	92,468	1,14,216	1,69,543	4,21,985	4,14,450
Grand Total, Receipts ..	(a) 7,78,973	11,26,791	13,01,343	8,41,735	40,48,842	41,18,771
EXPENDITURE.						
1. Refunds and drawbacks	8,328	10,908	,801	10,777	43,814	25,176
A. Conservancy and Works.						
I. Timber and other produce removed from the forests by Government Agency—						
(a) Timber	25,872	604	1,588	28,401	56,465	81,393
(b) Firewood and charcoal ..	28,459	5,639	1,088	58 450	93,636	1,51,783
(c) Bamboos	5,026	70	75	5,401	10,572	31,933
(d) Sandalwood	..	235	6,825	8,538	15,598	24,095
(e) Grass and other minor produce.	7,877	10,830	49	10,788	29,544	28,233
Total, A-I ..	67,234	17,378	9,625	1,11,578	2,05,815	3,17,437
II. Timber and other produce removed from the forests by consumers or purchasers.	54,236	34,016	23,299	17,898	1,29,449	1,30,245
III. Confiscated drift and waifwood ..	1,804	278	594	145	2,821	2,088
V. Rent of leased forests and payments to shareholders in forests managed by Government.	474	8,000	8	8,139	16,621	16,212
VI. Live-stock, stores, tools and plant—						
(a) Purchase of cattle ..	43	47	..	9,574	9,664	11,622
(b) Feed and keep of cattle ..	8,027	27	87	70,642	78,783	82,006
(c) Stores, tools and plant ..	12,484	8,257	4,185	7,937	32,863	30,162
Total, A-VI ..	20,554	8,331	4,272	88,153	1,21,310	1,23,790

(a) Excludes Rs. 14,801-7-10 being revenue realized in the Parlakimedi Maliahs.

Summary of receipts and expenditure during 1913-14 for each Circle and for the Presidency compiled in the Board's office from Accountant-General's statements—*cont.*

Budget heads.	Northern Circle.	Central Circle.	Southern Circle.	Western Circle.	Grand total, Presidency.	
					1913-14.	1912-13.
1	2	3	4	5	6	7
EXPENDITURE—*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
A. Conservancy and Works—cont.						
VII. Communications and buildings—						
(*a*) Roads and bridges ..	31,588	11,764	41,120	45,251	1,29,723	1,32,403
(*b*) Buildings	43,789	37,122	56,803	39,890	1,77,604	2,07,119
(*c*) Other works	8,869	3,947	6,097	10,198	29,111	21,785
Total, A-VII ..	84,246	52,833	1,04,020	95,339	3,36,438	3,61,307
VIII. Demarcation, etc.—						
(*a*) Demarcation	8,511	8,995	6,130	4,793	28,429	33,372
(*b*) Cost of settlement ..	1	588	2,501	15,660	18,750	12,804
(*c*) Surveys. (1) Local ..	10,580	6,820	7,102	5,595	30,097	30,944
(2) India ..	7	..	..	..	7	..
(*d*) Working-plans	..	..	3,095	104	3,199	— 183
(*e*) Sowing and planting ..	46,647	25,615	17,866	12,919	1,03,047	1,70,327
(*f*) Protection from fire ..	54,534	28,554	19,677	31,504	1,34,269	1,30,929
(*g*) Other works	14,872	75,984	66,661	19,512	1,77,029	1,89,030
Total, A-VIII ..	1,35,152	1,46,556	1,23,032	90,087	4,94,827	5,67,223
IX. Miscellaneous—						
(*a*) Law charges	1	380	112	13	506	705
(*b*) Other charges	1,365	1,174	989	7,331	10,859	11,351
Total, A-IX ..	1,366	1,554	1,101	7,344	11,365	12,056
Total, A. Conservancy and Works, inclusive of Refunds.	(*a*)3,73,394	2,79,854	2,79,752	4,29,460	13,62,460	15,55,534
B. Establishments.						
I. Salaries—						
(*a*) Conservators	22,800	18,000	20,445	24,812	86,057	82,043
(*b*) Superior officers	69,614	86,001	1,01,527	95,594	3,52,736	3,68,929
(*c*) Subordinate forest and depôt establishments.	1,19,323	1,17,850	1,11,599	1,06,627	4,55,399	4,50,027
(*d*) Office establishments ..	18,961	59,627	53,564	55,952	2,18,104	2,17,101
(*e*) Deputation and special allowance.	..	..	..	..	..	268
Total, B-I ..	2,60,698	2,81,478	2,87,135	2,82,985	11,12,296	11,18,368
II. Travelling allowances—						
(*a*) Conservators	4,429	3,547	2,194	1,925	12,095	10,121
(*b*) Superior officers	13,031	10,455	15,285	15,823	54,594	54,202
(*c*) Subordinate forest and depôt establishments.	36,936	33,793	32,045	26,141	1,28,915	1,23,839
(*d*) Office establishment ..	10,532	11,509	9,000	7,570	38,611	41,012
Total, B-II ..	64,928	59,304	58,524	51,459	2,34,215	2,29,174
III Contingencies—						
(*a*) Rents, rates and taxes ..	1,890	1,552	1,207	2,531	7,180	6,704
(*b*) Official postage and telegrams.	9,922	11,115	12,206	6,706 *699	40,648	40,517
(*c*) Sundries	23,083	20,396	18,875	21,789	84,143	91,860
Total, B-III ..	34,895	33,063	32,288	31,725	1,31,971	1,39,081
Total, B. Establishments ..	(*b*) 3,60,521	3,73,845	3,77,947	3,66,169	14,78,482	14,86,623
Grand Total, Expenditure including Refunds and Drawbacks.	7,33,915	6,53,699	6,57,699	7,95,629	28,40,942	30,42,157
Surplus	45,058	4,73,092	6,43,644	46,106	12,07,900	10,76,614
Total .	7,78,973	1,26,791	13,01,343	8,41,735	40,48,842	41,18,771

* Telephone charges.

(*a*) Excludes Rs. 9,841-7-1 belonging to the Parlakimedi Maliahs.
(*b*) Do. Rs. 19,116-13-9 do.

ANNUAL FORM No. 81.

Forest Department, Madras Presidency.

OUTSTANDINGS and liabilities on account of Contractors and Disbursers for the Forest year 1913–14.

District.	Department debtor.			Department creditor.			Balance due.	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To Department (Outstandings).	By Department (liabilities).
Northern Circle.		RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	
Direction, Northern Circle ..	..	2,399 11 6	2,399 11 6	125 9 10	2,325 6 0	2,450 15 10	51 4 4	..
Ganjām	..	86,328 6 5	86,328 6 5	2,914 7 4	86,393 0 2	89,307 7 6	2,979 1 1	..
Vizagapatam ..	..	36,428 4 10	36,428 4 10	1,797 2 2	35,334 13 5	37,131 15 7	703 10 9	..
Gōdāvari, Upper	..	42,098 11 0	42,098 11 0	1,649 2 10	41,747 4 4	43,396 7 2	1,297 12 2	..
Do. Lower	..	71,560 6 7	71,560 6 7	2,064 15 11	71,366 6 4	73,431 6 3	1,870 15 8	..
Kistna	..	43,167 9 0	43,167 9 0	512 7 8	43,876 6 7	44,388 14 3	1,221 5 3	..
Kurnool, East	..	1,03,045 5 7	1,03,045 5 7	2,075 13 11	1,03,235 7 9	1,05,311 5 8	2,266 0 1	..
Do South	..	1,36,685 13 9	1,36,685 13 9	2,643 11 6	1,36,001 15 6	1,38,545 11 0	1,859 13 3	..
Do. West	..	1,82,171 0 4	1,82,171 0 4	2,452 6 0	1,81,303 3 8	1,83,755 9 8	1,584 9 4	..
Total ..	..	7,03,885 5 0	7,03,885 5 0	16,135 13 2	7,01,583 15 9	7,17,719 12 11	13,834 7 11	..
Central Circle.								
Conservator, Central Circle..	..	886 7 5	886 7 5	93 7 11	896 14 5	990 6 4	103 14 11	..
Guntūr	..	58,074 1 5	58,074 1 5	1,124 9 1	57,726 2 9	58,850 11 10	776 10 5	..
Nellore	..	73,362 12 1	73,362 12 1	1,593 1 1	72,657 14 2	74,250 15 3	888 3 2	..
Cuddapah, West	..	40,388 11 10	40,388 11 10	728 1 3	40,411 2 5	41,139 3 8	750 7 10	..
Do. East	..	80,225 12 8	80,225 12 8	1,451 9 5	80,927 9 0	82,379 2 5	2,153 5 9	..
Bellary	..	92,996 14 0	92,996 14 0	3,578 1 4	90,869 11 4	94,447 12 8	1,450 14 8	..
Anantapur	..	69,034 2 7	69,034 2 7	1,691 3 5	68,863 13 0	70 555 0 5	1,520 13 10	..
Chittoor	..	61,661 4 7	61,661 4 7	1,426 7 1	60,629 15 2	62,056 6 3	395 1 8	..
Chingleput	..	37,724 14 6	37,724 14 6	841 8 6	37,885 14 1	38,727 6 7	1,002 8 1	..
Total ..	..	5,14,355 1 1	5,14,355 1 1	12,528 1 1	5,10,869 0 4	5,23,397 1 5	9,042 0 4	..
Southern Circle.								
Conservator, Southern Circle.	..	760 8 1	760 8 1	54 15 1	769 15 8	824 14 9	64 6 8	..
Vellore, North.. .. .	..	48,255 11 9	48,255 11 9	741 15 11	48,076 2 8	48,818 2 7	562 6 10	..
Do. South.. .. .	..	67,358 14 3	67,358 14 3	965 8 1	68,409 1 9	69,374 9 10	2,015 11 7	..
Arcot, South	..	42,339 15 7	42,339 15 7	625 13 7	41,975 6 9	42,601 4 4	261 4 9	..
Salem, North	..	63,676 11 0	63,676 11 0	1,373 12 7	63,662 11 1	65,036 7 8	1,359 12 8	..
Do. South	..	68,464 6 0	68,464 6 0	1,724 11 11	69,016 13 5	70,741 9 4	2,277 3 4	..
Trichinopoly *cum* Tanjore ..	..	56,714 12 11	56,714 12 11	1,670 4 9	55,502 10 10	57,172 15 7	458 2 8	..
Madura	..	1,25,362 4 2	1,25,362 4 2	5,299 8 9	1,22,960 3 10	1,28,259 12 7	2,897 8 5	..
Tinnevelly *cum* Ramnād .	..	58,923 12 9	58,923 12 9	2,559 2 6	57,760 3 7	60,319 6 1	1,395 9 4	..
Working plans officer, Southern Circle.	..	6,783 13 0	6,783 13 0	..	7,481 3 3	7,481 3 3	697 6 3	..
Total .	..	5,38,640 13 6	5,38,640 13 6	15,015 13 2	5,35,614 8 10	5,50,630 6 0	11,989 8 6	..
Western Circle.								
Conservator, Western Circle.	..	894 3 6	894 3 6	11 7 5	937 3 9	948 11 2	54 7 8	..
South Canara	..	1,09,627 0 1	1,09,627 0 1	2,510 2 6	1,09,553 12 0	1,12,063 14 6	2,436 14 5	..
North Malabar	..	82,528 3 10	82,528 3 10	4,931 13 1	79,214 3 0	84,146 0 1	1,617 12 3	..
South do.	..	68,007 13 9	68,007 13 9	2,179 9 9	67,242 2 5	69,421 12 2	1,413 14 5	..
The Nilgiris	..	1,11,827 2 8	1,11,827 2 8	6,657 7 4	1,07,977 0 5	1,14,634 7 9	2,807 5 1	..
Kollegal	..	63,369 9 8	63,369 9 8	2,924 11 9	62,858 4 5	65,783 0 2	2,413 6 6	..
North Coimbatore	..	95,787 7 2	95,787 7 2	3,247 12 3	95,449 13 2	98,697 9 5	2,910 2 3	..
Central do.	..	44,303 8 8	44,303 8 8	1,224 12 7	45,225 0 2	46,449 12 9	2,146 4 1	..
South do.	..	87,379 9 7	87,379 9 7	2,299 13 6	87,121 11 9	89,421 9 3	2,041 15 8	..
Total ..	..	6,63,724 10 11	6,63,724 10 11	25,987 10 2	6,55,579 3 1	6,81,566 13 3	17,842 2 4	..
Grand Total Presidency ..	..	24,20,605 14 6	24,20,605 14 6	69,667 5 7	24,03,646 12 0	24,73,314 1 7	52,708 3 1	..

ACCOUNTANT-GENERAL'S OFFICE,
MADRAS, *1st September* 1914.

H. BHIMASENA RAO,
Deputy Accountant-General.

ANNUAL FORM No. 82.

Forest Department, Madras Presidency.

REVENUE received and outstandings on account of revenue during 1913–14.

District.	Particulars.	Outstandings at commencement of the year.	Value of sales and other revenue during the year.	Total.	Amount realized during the year.	Balance due to the department at end of the year.
Northern Circle.		RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Direction	Timber and other forest produce.	..	2,502 0 0	2,502 0 0	2,502 0 0	..
Ganjam	Do.	(*i*) 5,895 6 0	(*j*)1,03,590 5 10	1,09,485 11 10 (*k*)	(*l*) 97,926 0 0	(*a*) and (*m*) 11,559 11 10
Vizagapatam	Do.	3,249 12 9	48,716 1 3	51,965 14 0	46,469 0 0	(*b*) 5,496 14 0
Godavari, Upper	Do.	961 12 9	52,364 11 0	53,326 7 9	53,227 0 0	99 7 9
Do. Lower	Do.	29,195 12 0	1,77,435 12 0	2,06,631 8 0	1,90,009 0 0	(*c*) 16,622 8 0
Kistna	Do.	24,113 8 0	82,009 6 9	1,06,122 14 9	92,957 0 0	(*d*) 13,165 14 9
Kurnool, East	Do.	21 4 0	72,257 6 1	72,278 10 1	66,356 0 0	(*e*) 5,922 10 1
Do. South	Do.	18,857 3 7	80,239 8 10	99,096 12 5	95,288 0 0	(*f*) 3,808 12 5
Do. West	Do.	4,362 12 5	1,38,384 12 3	1,42,747 8 8	1,34,239 0 0	(*g*) 8,508 8 8
	Total ..	86,657 7 6	7,57,500 0 0	8,44,157 7 6	7,78,973 0 0	65,184 7 6
Central Circle.						
Direction	Timber and other produce.	..	256 0 0	256 0 0	256 0 0	..
Bellary	Do.	94,190 12 2	1,41,171 9 1	2,35,362 5 3	1,89,699 0 0	45,663 5 3
Anantapur	Do.	3,34,678 6 1	98,027 5 8	4,32,705 11 9	2,08,007 0 0	2,24,698 11 9
Guntur	Do.	5,040 0 5 (*h*) —133 8 0	1,93,900 8 5	1,98,807 0 10	1,77,812 0 0	20,995 0 10
Cuddapah, West	Do.	2,221 0 2	59,463 4 3	61,684 4 5	58,319 0 0	3,365 4 5
Do. East	Do.	5,968 14 1	91,958 3 9	97,927 1 10	78,024 0 0	19,903 1 10
Nellore	Do.	67,543 0 0	2,63,254 9 6	3,30,797 9 6	2,36,002 0 0	94,795 9 6
Chingleput	Do.	8,395 14 0	69,625 10 0	78,021 8 0	71,734 0 0	6,287 8 0
Chittoor	Do.	14,881 10 8	1,04,321 8 10	1,19,203 3 6	1,06,938 0 0	12,265 3 6
	Total ..	5,32,919 9 7 —133 8 0	10,21,978 11 6	15,54,764 13 1	11,26,791 0 0	4,27,973 13 1
Southern Circle.						
Direction	Timber and other forest produce.	..	14 0 0	14 0 0	14 0 0	..
Vellore, North ..	Do.	39,040 8 5	1,30,012 0 7	1,69,052 9 0	1,48,700 0 0	20,352 9 0
Do. South	Do.	85,175 8 0	1,47,564 9 10	2,32,740 1 10	1,97,468 0 0	35,272 1 10
Arcot, South	Do.	31,418 8 0	2,20,853 5 5	2,52,271 13 5	2,25,651 0 0	26,620 13 5
Salem, North	Do.	17,215 14 10	1,68,681 12 4	1,85,897 11 2	1,14,990 0 0	70,907 11 2
Do. South	Do.	52,973 0 2	1,90,243 5 10	2,23,216 6 0	1,42,363 0 0	80,853 6 0
Trichinopoly	Do	27,901 7 4	1,87,998 15 10	2,15,900 7 2	1,87,135 0 0	28,765 7 2
Madura	Do.	19,228 3 4 * — 21 8 9	1,40,102 0 5	1,59,308 11 0	1,44,726 0 0	14,582 11 0
Tinnevelly	Do.	21,092 4 10	1,31,745 11 0	1,52,837 15 10	1,40,296 0 0	12,541 15 10
	Total ..	2,74,045 6 11 * — 22 8 9	13,17,215 12 3	15,91,239 11 5	13,01,343 0 0	2,89,896 11 5
Western Circle.						
Direction	Timber and other forest produce.	..	276 9 7	276 9 7	276 9 7	..
South Canara	Do.	5,218 11 5 — 63 8 0	1,87,203 3 11	1,92,358 7 4	1,60,078 0 0 †40 3 10	32,240 3 6
Malabar, North	Do.	16,500 6 2	49,535 0 4	66,035 6 6	61,279 0 0 † 231 6 3	4,525 0 3
Do. South	Do.	1,031 15 6	1,08,022 15 0	1,09,054 14 6	1,08,630 0 0	424 14 6
The Nilgiris	Do.	5,977 0 3 — 107 5 4	92,945 10 4	98,815 5 3	93,322 0 0	5,493 5 3
Kollegal	Do.	211 6 7	64,250 0 5	64,461 7 0	63,595 0 0 †217 8 0	648 15 0
Coimbatore, North	Do.	2,739 0 8	1,29,053 4 10	1,31,792 5 6	1,26,603 0 0	5,189 5 6
Do. Central	Do.	15,757 9 2	65,360 11 8	81,118 4 10	69,046 0 0 †843 0 0	11,229 4 10
Do. South	Do.	2,112 6 0	1,58,151 12 6	1,60,264 2 6	1,58,905 0 0	1,359 2 6
	Total ..	49,548 7 9 —170 13 4	8,54,799 4 7	9,04,176 15 0	8,41,734 9 7 †1,332 2 1	61,110 3 4
	Grand Total, Presidency.	9,43,170 15 9 — 325 14 1	39,51,493 13 4	48,94,338 15 0	40,48,841 9 7 + 1,332 2 1	8,44,165 3 4

(*a*) Includes Rs. 6,567–0–0 due in 1914–15 ; Rs. 893–0–0 covered by deposit and Rs. 696–3–0 relating to lands not managed by the Forest Department.
(*b*) Includes Rs. 4,831–14–0 due in 1914–15.
(*c*) Do. Rs. 13,478–12–0 due in 1914–15.
(*d*) Do. Rs. 12,256–10–8 due in 1914–15 ; and Rs. 198–5–6 relating to lands not managed by the Forest Department.
(*e*) Do. Rs. 500–0–0 covered by deposit.
(*f*) Do. Rs. 3,123–1–4 due in 1914–15 ; and Rs. 677–15–9 covered by deposit.
(*g*) Do. Rs. 20–0–0 covered by deposit.
(*h*) Collected in previous year but omitted to be adjusted towards outstandings.
(*i*) Excludes Rs. 200 belonging to Parlakimedi maliahs.
(*j*) Do. Rs. 9,555 do.
(*k*) Do. Rs. 9,755 do.
(*l*) Do. Rs. 9,355 do.
(*m*) Do. Rs. 400 do.

*The deduction is on account of erroneous demand.
† Written off the accounts.

NOTE.—Deductions in column 3 are on account of erroneous demands. Out of the total outstandings of Rs. 61,110–3–4 the amount actually due on or before 30th June 1914 was Rs. 7,722.

ANNUAL FORM No. 83.

Forest Department, Madras Presidency.

FINANCIAL results of the year 1913–14.

District.	Timber and other produce removed from the Forest by Government Agency.		Other Revenue.		Formation, Protection, and Improvement of forests.	Total.	
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.
Northern Circle.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Ganjām	(*a*) 25,811	(*b*) 21,349	(*c*) 72,139	(*d*) 43,674	(*e*) 32,660	(*f*) 97,950	(*g*) 97,683
Vizagapatam	7,796	6,711	38,680	21,728	7,285	46,476	35,724
Gōdāvari, Upper ..	820	3,442	52,407	31,721	21,230	53,227	56,393
Do. Lower ..	4,505	10,336	1,85,504	59,109	26,958	1,90,009	96,403
Kistna	903	2,113	92,054	28,764	26,338	92,957	57 215
Kurnool, East ..	4,096	7,514	62,264	29,796	64,319	66,360	1,01,629
Do. South ..	39,091	38,514	58,614	32,986	55,095	97,705	1,26,595
Do. West ..	51,306	36,514	82,983	45,124	72,307	1,34,289	1,53,945
Total ..	1,34,328	1,26,493	6,44,645	2,92,902	3,06,192	7,78,973	7,25,587 * 8,328
Central Circle.							
Bellary	1,949	484	1,88,006	62,632	49,044	1,89,955	1,12,160
Anantapur	228	239	2,07,779	50,525	39,508	2,08,007	90,272
Guntūr	6,392	3,584	1,71,420	40,410	29,133	1,77,812	73,127
Cuddapah, East ..	10,122	6,626	67,902	51,930	30,141	78,024	88,697
Do. West ..	2,405	1,015	55,914	27,462	18,596	58,319	47,073
Nellore	11,207	3,587	2,24,795	56,672	41,543	2,36,002	1,01,802
Chingleput	113	740	71,621	24,343	22,044	71,734	47,127
Chittoor	6,623	1,103	1,00,315	45,510	35,920	1,06,938	82,533
Total ..	39,039	17,378	10,87,752	3,59,484	2,65,929	11,26,791	6,42,791 + * 10,908
Southern Circle.							
Vellore, North ..	318	4,042	1,48,384	24,980	25,770	1,48,702	54,792
Do. South ..	70,769	15,162	1,26,761	35,016	33,687	1,97,470	83,865
Arcot, South	379	1,935	2,25,274	19,609	30,927	2,25,653	52,471
Salem, North	15,540	14,633	99,452	35,400	45,430	1,14,992	95,463
Do. South	5,802	7,998	1,36,563	32,632	33,324	1,42,365	73,954
Trichinopoly	1,412	6,882	1,85,725	44,174	27,853	1,87,137	78,909
Madura	310	16,133	1,44,418	42,744	70,234	1,44,728	1,29,111
Tinnevelly	1,077	7,434	1,39,219	40,316	27,583	1,40,296	75,333
Total ..	95,607	74,219	12,05,736	2,74,871	2,94,808	13,01,343	6,43,898 * + 13,801
Western Circle.							
South Canara	45,898	41,351	1,14,214	45,681	13,451	1,60,112	1,00,483
Malabar, North ..	15,921	18,171	45,392	42,037	46,361	61,313	1,06,569
Do. South ..	81,242	43,660	21,898	10,804	32,849	1,03,140	87,313
The Nilgiris	51,656	90,943	44,476	26,265	35,177	96,132	1,52,385
Kollegal	31,129	15,914	32,501	17,269	30,728	63,630	63,911
Coimbatore, North ..	60,718	25,302	65,920	33,455	51,884	1,26,638	1,10,641
Do. Central ..	3,919	2,719	65,161	26,802	31,139	69,080	60,660
Do. South ..	83,011	38,647	78,679	42,681	28,751	1,61,690	1,10,079
Total ..	3,73,494	2,76,707	4,68,241	2,44,994	2,70,340	8,41,735	7,92,041
Grand total, Presidency.	6,42,468	4,94,797	14,06,374	11,72,251	11,37,269	20,48,842	27,04,317 * 33,037

* Refunds and drawbacks.

(*a*) Excludes Rs. 1,518-5-10 belonging to Parlākimedi Maliahs.
(*b*) Do. Rs. 517-13-8 do.
(*c*) Do. Rs. 12,883-2-0 do.
(*d*) Do. Rs. 696-3-7 do.
(*e*) Do. Rs. 5,050-3-0 do.
(*f*) Do. Rs. 14,401-7-10 do.
(*g*) Do. Rs. 6,264-4-3 do.

ANNUAL FORM No. 84.

Forest Department, Madras Presidency.

STATEMENT of elephants and other Live-stock during 1913-14.

PART I.

District.	On hand at the commencement of the year.		Number received during the year	Number disposed of during the year.	On hand at the end of the year.		Total expenditure on maintenance during the year.
	Number.	Value.			Number.	Value.	
1	2	3	4	5	6	7	8
(1) ELEPHANTS.							
Northern Circle.							
		RS.				RS.	RS. A. P.
Ganjam	3	5,450	..	..	3	5,450	2,108 0 0
Vizagapatam	1	1,500	..	..	1	1,500	1,012 0 0
Godavari, Upper	1	900	..	..	1	900	894 0 0
Kurnool, West	2	3,100	..	..	2	3,100	1,604 0 0
Total ..	7	10,950	..	..	7	10,950	5,619 0 0
Western Circle.							
Malabar, North	18	40,500	12	3	27	69,500	11,441 14 3
Do. South	33	1,04,200	1	10	24	81,800	13,930 1 2
The Nilgiris	48	90,500	10	10	48	1,04,000	18,208 3 2
Coimbatore, South ..	18	40,500	4	6	16	43,000	9,996 11 0
Total ..	117	2,75,700	27	29	115	2,98,300	53,576 13 7
Grand Total, Elephants, Presidency.	124	2,86,650	27	29	122	3,09,250	59,195 13 7
(2) OTHER LIVE-STOCK.							
Northern Circle.							
Ganjam	2	50	..	2	..	..	..
Kurnool, South	32	1,626		2	30	1,500	2,813 0 0
Total ..	34	1,676	..	4	30	1,500	2,813 0 0
Central Circle.							
Chittoor	2	38	..	..	2	34	..
Southern Circle.							
Vellore, North	2	40	..	2	..	..	48 0 0
Western Circle.							
South Canara	57	3,960	..	31	26	1,285	2,966 5 11
Malabar, North	2	160	2	2	2	200	730 7 8
Do. South	25	1,013	18	5	38	1,657	1,848 12 10
The Nilgiris	25	1,100	..	10	15	900	3,487 11 3
Coimbatore, South	76	5,439	..	37	39	1,970	6,652 3 5
Total ..	185	12,072	20	85	120	6,012	15,685 9 1
Grand Total (Other Live stock), Presidency.	223	13,826	20	91	152	7,546	18,546 9 1

Statement of elephants and other Live-stock during 1913-14—*cont.*

PART II.

District.	Names.	When purchased or otherwise obtained by Government.	Age.	How disposed of.
1	2	3	4	5
	ELEPHANTS GONE OFF DURING THE YEAR.			
	Northern Circle—Nil.			
	Central Circle—Nil.			
	Southern Circle—Nil.			
	Western Circle.			
			YRS.	
Malabar, North.	1. Balakrishna ..	Captured on 13th May 1914 (3 months)	..	Died.
	2. Abdur Rahiman	Do. 17th April 1900	29	Transferred to South Coimbatore.
	3. Helen	Do. 12th April 1906	27	
Malabar, South.	1. Dorrothy ..	Do. 18th March ,, ...	12	Sold.
	2. Doddanmari ..	Do. 11th October ,, ...	10	
	3. Savi	Do. 5th August 1907	10	
	4. Claudia ..	Do. 22nd November 1909	6	
	5. Selvaraj	Do. 7th October 1910	7	
	6. Agnes	Do. 11th March 1906	29	
	7. Kaliani	Purchased on 4th October 1889	74	Transferred to South Coimbatore.
	8. Gangadin ..	Captured on 16th March 1913	13	Died.
	9. George	Do. 17th February 1906	13	
	10. Kali	Do. 27th June 1908	12	
The Nilgiris.	1. Rani ..	Do. 17th April 1910	23	Sold.
	2. Charlie ..	Do. 6th March 1911	7	
	3. Amir Ali ..	Do. 4th April 1911	12	
	4. Nurjehan ..	Do. 6th March 1912	5	
	5. Rukmani ..	Do. 8th April 1912	8	
	6. Ganga Prasad ..	Do. 10th April ,, ...	7	
	7. Krishna	Do. 16th April 1911	4	
	8. Droupadi ..	Do 14th May 1912	8	
	9. Sakuntala ..	Do. do. ,, ...	2	
	10. Kamakshi ..	Do. 11th March ,, ...	60	Shot.
Coimbatore, South.	1. Vadakkan ..	Do. 18th September 1911	16	Died.
	2. Sheba	Do. 31st July 1912	5	
	3. Sathyabhama ..	Do. 29th October 1913	50	
	4. Leila	Do. 6th September 1912	5	Sold.
	5. Christabal ..	Do. 7th September ,, ...	7	
	6. Gowri	Do. 27th do. ,, ...	1	

Annual Form No. 85.

Forest Department, Madras Presidency.

Abstract showing the value of stores, tools and plant for 1913–14.

District.	Buildings.				Stores.				Total.				Difference in value.	
	On hand at the commencement of the year.		On hand at the end of the year.		On hand at the commencement of the year.		On hand at the end of the year.		On hand at the commencement of the year.		On hand at the end of the year.			
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	In favour of the year.	Against the year.
1	2.	3	4	5	6	7	8	9	10	11	12	13	14	15
Northern Circle.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	Rs.	Rs.
Direction ..	1	740	1	740	319	* 3,094	333	3,352	320	3,834	334	4,092	258	..
Ganjām ..	139	58,961	147	55,048	(a)2,368	(b)8,544	(a)2,492	(b)7,671	2,507	67,505	2,639	62,719	..	4,786
Vizagapatam ..	77	10,593	86	11,044	1,254	3,081	1,354	2,878	1,331	13,674	1,440	13,922	248	..
Gōdāvari, Upper.	117	* 26,030	117	24,329	* 1,953	15,553	1,874	15,099	* 2,070	* 41,583	1,991	39,428	..	2,155
Gōdāvari, Lower.	156	52,560	134	53,199	1,929	9,521	2,008	9,076	2,085	62,081	2,142	62,275	194	..
Kistna ..	68	7,956	63	6,651	1,609	7,457	2,417	8,484	1,677	15,413	2,480	15,135	..	278
Kurnool, East.	20	21,360	28	30,084	2,883	7,054	2,967	7,188	2,903	28,414	2,995	37,272	8,858	..
Do. South.	49	32,072	76	42,209	3,996	11,818	4,303	11,338	4,045	43,890	4,379	53,547	9,657	..
Do. West.	89	97,352	85	94,886	6,022	13,192	5,163	12,226	6,111	1,10,544	5,248	1,07,112	..	3,432
Total ..	716	3,07,624	737	3,18,190	22,333	79,314	22,911	77,312	23,049	3,86,938	23,648	3,95,502	8,564	..
Central Circle.														
Direction ..	..	..	..	..	351	2,904	240	2,930	351	2,904	240	2,930	26	..
Bellary ..	67	60,238	56	59,031	2,502	7,861	2,161	8,938	2,569	68,099	2,217	67,969	..	130
Anantapur ..	39	42,457	36	45,708	1,809	6,711	1,875	6,606	1,848	49,168	1,911	52,314	3,146	..
Guntūr ..	40	6,062	41	5,999	1,927	11,286	1,806	10,464	1,967	17,348	1,847	16,463	..	885
West Cuddapah.	46	12,073	40	12,169	2,033	7,325	2,269	7,759	2,079	19,398	2,309	19,928	530	..
East Cuddapah.	71	17,448	73	16,882	1,439	9,862	1,278	7,889	1,510	27,310	1,354	24,771	..	2,539
Nellore ..	84	27,142	43	33,878	53,103	47,401	44,697	42,615	53,187	74,543	44,740	76,493	1,950	..
Chingleput ..	45	10,298	41	† 11,218	1,195	6,356	1,707	5,348	1,240	16,654	1,748	16,566	..	88
Chittoor ..	52	15,835	45	17,950	1,869	7,426	2,493	5,917	1,921	23,261	2,538	23,867	606	..
Total ..	394	1,91,553	378	2,02,835	66,228	1,07,132	58,526	98,466	66,622	2,98,685	58,904	3,01,301	2,616	..
Southern Circle.														
Direction ..	..	..	..	..	160	3,030	159	2,934	160	3,030	159	2,934	..	96
North Vellore.	41	11,477	40	10,910	1,538	5,012	1,546	5,641	1,579	16,489	1,586	16,551	62	..
South do.	52	34,748	53	30,629	3,603	8,619	3,300	10,011	3,655	43,367	3,353	40,640	..	2,727
South Arcot ..	47	20,211	35	19,400	1,268	3,819	1,475	3,089	1,315	24,030	1,510	22,489	..	1,541
North Salem ..	68	31,725	85	41,928	2,084	7,203	1,931	7,529	2,152	38,928	2,016	49,457	10,529	..
South do. ..	52	17,998	52	26,188	3,037	8,337	2,508	7,033	3,089	26,335	2,560	33,221	6,886	* ..
Trichinopoly ..	36	13,247	35	16,751	3,749	14,542	3,481	10,239	3,785	27,789	3,516	26,990	..	799
Madura ..	105	66,295	107	69,791	3,238	6,668	3,439	6,795	3,343	72,963	3,546	76,586	3,623	..
Tinnevelly *cum* Rāmnād.	82	43,046	83	43,055	1,892	4,614	1,929	4,866	1,974	47,660	2,012	47,921	261	..
Vernacular Training School.	..	..	..	..	316	1,553	335	1,481	316	1,553	335	1,481	..	72
Total ..	483	2,38,747	490	2,58,652	20,885	63,397	20,103	59,618	21,368	3,02,144	20,593	3,18,270	16,126	..
Western Circle.														
Direction ..	1	82	1	78	869	6,898	844	6,309	870	6,980	845	6,387	..	593
South Canara ..	53	24,399	50	24,099	1,950	10,823	2,010	9,129	2,003	35,222	2,060	33,228	..	1,994
Malabar, North	71	45,512	68	36,835	2,404	7,548	3,613	6,979	2,475	53,060	3,681	43,814	..	9,246
Do. South.	43	33,849	40	34,505	2,190	6,143	1,591	5,270	2,233	39,992	1,631	39,775	..	217
The Nilgiris ..	65	29,199	65	35,910	1,714	10,395	1,634	12,472	1,779	39,594	1,699	48,382	8,788	..
Kollegal ..	29	18,917	34	28,224	1,483	6,241	4,696	7,663	1,512	25,158	4,730	35,887	10,729	..
Coimbatore, North.	62	46,636	65	51,325	2,850	10,418	3,157	11,212	2,912	57,054	3,222	62,537	5,483	..
Do. Central	57	20,620	57	21,694	7,578	8,828	7,654	8,338	7,635	29,448	7,711	30,032	584	..
Do. South.	63	32,048	65	34,449	8,564	36,338	7,334	17,006	8,627	68,386	7,399	51,455	..	16,931
Vernacular Training School.	..	..	..	..	248	1,077	330	1,083	248	1,077	330	1,083	6	..
Total ..	444	2,51,262	445	2,67,119	29,850	1,04,709	32,863	85,461	30,294	3,55,971	33,308	3,52,580	..	3,391
Grand Total, Presidency.	2,037	9,89,186	2,050	10,46,796	1,39,296	3,54,552	1,34,403	3,20,857	1,41,333	13,43,738	1,36,453	13,67,653	23,915	..

* Correct figures furnished by the Collector.

† Includes Rs. 2,000 cost of extension to Kambakkum hill bungalow incurred in 1912–13, but omitted to be included in the last year's return by the Collector.

(a) Excludes 563 items belonging to Parlākimedi Maliahs.

(b) Do. Rs. 2,132–15–0 do.

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

READ—the following paper :—

Proceedings of the Board of Revenue (Land Revenue), Forest No. 226, dated 26th November 1914.

The Hon'ble Mr. R. C. C. CARR, I.C.S.

The Board submits to Government the progress report of Forest Administration in the Madras Presidency for the year ending with 30th June 1914.

CONSTITUTION OF STATE FORESTS.

2. *Alteration in area.*—Nearly 292 square miles chiefly in *Kollegal*, and to a smaller extent in *Ganjām*, *Bellary* and *North Coimbatore* were constituted reserved forests during the year. There were also the following changes. There was an increase of 15 square miles due to the adoption of Survey of India figures in the *Kurnool East and South divisions* and *South Malabar* and of 1 square mile on account of correct computation in *Nellore*. There was a decrease of 52 square miles by disafforestation made up of 39 square miles of forest enclosures in the *Javadis* in *North and South Vellore divisions*, 9 square miles of casuarina plantations in *South Arcot* and *Trichinopoly*, and 3 square miles in the districts of *Gōdāvari Lower*, *Chittoor*, *Central Coimbatore* and *Kistna*. There was also a decrease of 21 square miles due to the adoption of Survey of India figures in the districts of *Kurnool East* and *South* and the *Nilgiris*; of 5 square miles on account of recomputation of areas of reserves investigated by the Special Deputy Collector, Madura; and of 8 square miles from correct computation of areas in *Nellore*. The net result of these changes was an increase of 222 square miles in the total area of reserved forests which stood at 18,863 square miles at the close of the year.

The area of reserved lands fell from 826 to 802 square miles. About 275 square miles were newly notified under section 4 of the Forest Act chiefly in the districts of *Gōdāvari Upper*, *South Salem* and *Trichinopoly* cum *Tanjore* and 292 square miles were notified under section 16. About 2 square miles were excluded at settlement; 1 square mile was excluded by rectification of area and by the cancellation of section 4 notifications in the districts of *South Malabar*, *Anantapur* and *Nellore*; and 4 square miles were transferred to unreserved lands in *Kistna*. In the Parlākimedi Maliahs, four blocks aggregating 19 square miles belonging to the Parlākimedi range were added to reserved lands during the year. The total number of blocks selected up to the end of the year under report in both the Parlākimedi and Chandragiri ranges was 20 aggregating about 157 square miles.

3. *Forest settlement.*—It will be seen from appendix B that 635 square miles notified under section 4 of the Forest Act remained to be notified under section 16 at the end of the year. The settlement of 260 square miles was practically completed, leaving a balance of 375 square miles still to be settled. As in previous years settlement work was mostly carried out by Revenue Divisional Officers. The Deputy Collector appointed to revise the boundaries of some of the existing reserves in Madura

continued his work throughout the year and prepared revised notifications for nine reserves on the Palni hills. It is reported that the work of investigation of all reserves will be completed within the period for which the Deputy Collector and his establishment were sanctioned, viz., 15th June 1915. The Deputy Collector appointed for forest settlement work in the Coimbatore district in G.O. No. 770, Revenue, dated the 14th March 1913, ceased work in December 1913 and the work that remained to be done in the district was entrusted to the Revenue Divisional Officers.

4. *Demarcation.*—The total length of boundaries at the close of the year was 37,018 miles (or 66 miles more than in the previous year) of which 1,775 miles do not require artificial demarcation. The total length of artificially marked boundaries at the close of the year was 34,454 miles, of which 221 miles were done for the first time during the year against 275 miles in 1912–13. Seven hundred and eighty-nine miles remained still to be demarcated at the close of the year principally in *Ganjām*, *Madura* and *Kollegal*. The Conservator, Central Circle, reports that in his circle the matter of permanent demarcation of reserved forests received special attention during the year and good progress was made in all districts, several reserves having been demarcated with solid stone pillars surrounded by well-packed cairns of stones. Where stone is plentiful, as in Cuddapah, it is possible to make walls of loose-packed stones, and this system is employed for the protection of worked coupes. In many districts the plan of stone lining is followed, rows of stones being placed between cairns to mark the boundary. The length of old boundaries repaired during the year was 18,148 miles against 19,314 miles in the previous year and the length of boundaries cleared by subordinates free of cost rose from 13,233 miles to 14,922 miles. The progress made was satisfactory. The average cost per mile of fresh demarcation fell from Rs. 35–12–1 to Rs. 31–8–3, while the cost of repairs rose from Rs. 2–7–5 to Rs. 6–4–11. The increased cost of repairs occurred in the Northern and Southern Circles. In the Northern Circle the increase is attributed to broadening interior lines in *Kurnool East* and *Gōdāvari Lower* ; the increase in the Southern has not been explained.

5. *Surveys.*—The Survey of India party surveyed topographically on the 2 inch= 1 mile scale, 146 square miles in *South Vellore*, 7 square miles in *South Arcot*, and 24 square miles in *South Salem*. In the Northern Circle Index maps for *Ganjām*, *Vizagapatam*, *Gōdāvari Lower* and *Kistna* were published during the year and those for the three divisions of *Kurnool* are reported to be under different stages of preparation. The index map of the Madras Presidency showing the limits of controlling and executive charges prepared by the Forest Map Officer, Dehra Dun, is reported to be in the Press. The Forest Map Officer, Ootacamund, has completed the District reference maps of *Trichinopoly* cum *Tanjore*, *Chingleput*, *North Vellore and Chittoor and parts of Ganjām*, *Kistna and Nellore*. The progress of the work is said to have been not so good as was expected. It is stated that the reference maps of *Kollegal* and *Central and South Coimbatore divisions* were published and those of *South Canara*, *North Coimbatore and the Nilgiris* were in the Press in the Forest Map office at Dehra Dun at the close of the year. Mr. Curtis of the Madras Survey Department surveyed the new estates on the Anamalais from November 1913 to May 1914. The work is not yet complete and in their order Mis. No. 2809, Revenue, dated 29th September 1914, Government have sanctioned the further deputation of Mr. Curtis for four months from 15th November 1914. Miscellaneous work such as survey of coupes, alignment of roads and fire lines, verification of boundaries and preparation of coupe and working-plans maps were done by departmental surveyors.

Management of Forests.

(1) *Regulation and Management.*

6. *Working-plans.*—Preliminary working-plans for the forests of Chelama, Giddalore and Sirvel ranges in South Kurnool division comprising an area of 572 square miles were sanctioned during the year under report and plans were either under preparation or revision for 3,477 square miles. A tentative working-plan for the reserves in the Dharmapuri range has been returned to the Conservator, Southern Circle, for revision. Working-plans for Erode and Mettupalaiyam ranges prepared

by the District Forest Officer, Central Coimbatore, were returned to the Conservator, Western Circle, for revision. In *South Canara*, Mr. Hart, Extra Assistant Conservator was posted on working-plans duty towards the end of the year for preparing a preliminary working-plan for the extraction of overmature timber in the reserves at the foot of the ghats. In *Bellary* working-plans sanctioned for Adōni, Alur, Bellary and Harpanahalli ranges which provided for large cultural operations in degraded areas were cancelled. The working-plan of Seshachellam timber working circle was also cancelled during the year, owing to the difficulty of working the prescribed selection system over extensive areas.

7. Mr. C. C. Wilson, Special Working-plans Officer, has been engaged in preparing working-plans for the sandalwood areas in North Arcot and Salem. In the revised reorganisation proposals submitted to Government in Board's Proceedings Forest No. 111, dated 11th June 1914, the Board recommended the employment of a working-plans officer for each circle and a central working-plans officer to ensure control in the actual working of sanctioned plans. As remarked by the Conservator, Central Circle, most working plans need revision as their provisions have by no means been fully carried out and it is of little use to have paper plans the provisions of which cannot be applied in practice. The present forest policy will involve the overhauling of many, if not all, working-plans already framed and this work is now being undertaken. Mr. Wilson is now engaged on a revision of the working-plans for fuel areas in Madura with a view to an increase of supply to Madura town.

(2) *Communications and buildings.*

8. The following statement compares the expenditure during the year on the construction and maintenance of roads, bridges and buildings in the four circles with that of the preceding year :—

—	Roads and bridges.		Buildings.	
	1912–1913.	1913–1914.	1912–1913.	1913–1914.
	Rs.	Rs.	Rs.	Rs.
Northern Circle	35,887	31,588	49,113	43,789
Central Circle	14,271	11,764	51,816	37,122
Southern Circle	35,644	41,120	57,642	56,803
Western Circle	46,601	45,251	48,548	39,890
Total ..	1,32,403	1,29,723	2,07,119	1,77,604

The total expenditure on roads and bridges fell by over Rs. 2,500 and that on buildings by nearly Rs. 30,000. In Northern and Central Circles the decreased expenditure is reported to be due to greater scrutiny exercised in selecting works and postponement of some pending the preparation of a five years' programme of roads and buildings called for by the Board. In his valuable note on forest revenue and expenditure in this Presidency Mr. Beadon Bryant advised that as much money as possible should be spent on roads and transport schemes so far as they could be shown to pay. He also pointed out the immense importance of providing suitable accommodation for both controlling and subordinate staffs. He advised, however, that schemes for both roads and buildings should be framed for a term of years and an annual grant allotted for these purposes. In G.O. No. 87, Revenue, dated 7th January 1914, Government laid down the policy to be adopted in the future construction of forest roads and buildings. Schemes have been received from the Central, Southern and Western Circles, and a report will be submitted to Government on receipt of reply from the Conservator, Northern Circle. In G.O. No. 1865 W., dated 3rd October 1914, Government have recently sanctioned two temporary Engineers for the investigation and execution of forest schemes in this Presidency.

The tramway in *Nellore* and *South Coimbatore* worked as usual but that in the latter division worked at a loss of Rs. 754. In the Sriharikota and Coast ranges of Nellore, 7,602 tons and 6,308 tons of fuel were carried against 8,749 and 5,257 tons

respectively in the previous year. The outturn of work by the Mount Stuart tramway in *South Coimbatore* fell considerably from 10,666 ton miles to 2,105 ton miles; the Conservator explains this by saying that the Government bullocks were employed in carting to depots the large quantity of timber—trammed last year, and that good working bullocks could not be had for hire.

9. *Miscellaneous Works.*—The expenditure under this head increased from Rs. 21,785 to Rs. 29,111. The chief works consisted as usual in fencing compounds and reserves and construction of, and repairs to, tanks and wells. Work was done in bunding streams in *Kurnool*, *North Malabar* and *North Salem*.

(3) *Protection of Forests.*

10. The following table compares the forest offences reported during the year with those of 1912–13 and with the average of the three years ending 1912–13:—

—	Injury to forests by fire.		Unauthorized felling and removal of forest produce.		Unauthorized grazing.		Other offences.		Total.		Average for three years ending 1912–13.
	1912-13.	1913-14.	1912-13.	1913-14.	1912-13.	1913-14.	1912-13.	1913-14.	1912-13.	1913-14.	
A. Cases taken to Court.	65	54	3,526	3,969	1,583	1,835	321	404	5,495	6,262	5,204
B. Cases compounded.	63	76	15,104	15,532	6,829	6,937	734	1,059	22,730	23,604	21,455
C. Undetected ..	949	1,056	524	577	179	261	15	17	1,667	1,911	1,799
Total ..	1,077	1,186	19,154	20,078	8,591	9,033	1,070	1,480	29,892	31,777	28,458

The procedure in regard to grouping offences under A and B has not been uniform in the past; the subject is at present under the Board's consideration with reference to Government Memorandum No. 2305 E/14-1, dated 15th October 1914, and a separate report will be submitted. The total number of offences increased under all heads. Under injury to forests by fire the increase was about 10 per cent., occurring mainly in *Gōdāvari-Upper*, *Kurnool South*, *Chittoor*, *North Salem* and *North Coimbatore*. There was a decrease in *Ganjām*, *Bellary* and *Anantapur*. The increase was due to the season having been exceptionally dry and to a large increase under cases undetected. The number of offences under illicit felling and illicit grazing increased by about 5 per cent. each. The increase under the former head occurred in *Kurnool West* and *South* divisions, *Cuddapah West*, *Chingleput*, *South Arcot*, *South Salem*, *Madura* and *South Canara* counterbalanced to some extent by a decrease in *Bellary*, *Guntūr*, *South Vellore*, *Trichinopoly* and *North Coimbatore*. The increase in several districts in the Central and Southern Circles is reported to be due to the detection of a larger number of offences in unreserved lands for which more correct returns are furnished this year. In some cases the increase is attributed to better supervision. The increase in grazing offences occurred in *Bellary*, *Nellore*, *Trichinopoly* and *Tinnevelly*. There was a decrease in *Guntur*, *North Vellore* and *North Coimbatore*. In *Bellary*, the increase is said to be due to better supervision; in *Nellore* to the detection of a large number of offences in fenced areas; and in the remaining districts to the detection of a larger number of offences in unreserved lands. The number of "other offences" increased by about 38 per cent. The increase is marked in *Cuddapah West*, *Trichinopoly* and *South Canara*. In *South Canara* it is due to smuggling of sandalwood from Kumaki lands under cover of warg permit; in *Cuddapah West* and *Trichinopoly* the increase has not been satisfactorily explained.

11. As noted above the subject of forest crime is engaging special attention. It is obvious that offences will as a rule vary in accordance with the density of population and proximity of the forests. In *North* and *South Malabar* with their fine ghat forests and valuable teak plantations the total offences reported from reserves and unreserves in the two forest divisions combined was less than 50. In *Kurnool East*

with a reserved forest area of above 1,000 square miles offences totalled less than 400 in reserves and only 40 in unreserves. In *South Arcot* on the other hand with only 345 square miles of reserves, averaging for each reserve less than 3 square miles, there were over 3,000 offence reports. The whole Northern Circle was slightly over 4,000 and the whole Western Circle under 4,000. The revised policy which aims at relaxing control over small scattered reserves and entrusting grazing areas to village panchayats strikes at the root of the offence evil. The Board has moreover issued general instructions to the effect that protection should aim at *preventing* offences rather than *detecting* them. These measures will in time reduce the annual figures in return No. 71, and it is hoped that stricter supervision in the more important forest areas will also minimise the opportunities for forest offences.

12. The percentage of cases undetected, compounded and taken to Court to cases reported was 19·70, 74·29 and 6·01 against 5·6, 76 and 18·4 in the previous year. The total number of cases disposed of by Courts rose from 5,968 to 6,401, and the percentage of acquittals to cases prosecuted decreased from 10·3 to 7·5.

The number of cases compounded by District Forest Officers and Revenue Divisional Officers rose from 20,910 to 21,183 and the amount of compensation fees realized likewise rose from Rs. 1,94,940 to Rs. 2,14,180. The average fee per case was Rs. 10–1–4 against Rs. 9–5–2 in the previous year.

13. The rules laid down by Government in G.Os. No. 1990, Revenue, dated 13th June 1910, and No. 3958, Revenue, dated 14th December 1910, for the guidance of forest officers in compounding offences of illicit grazing have worked satisfactorily.

14. The closure of forests to grazing as a punishment for systematic offences on a large scale was not considered necessary in any district except in *North Salem* where four reserves were closed for a very short time. Certain reserves in *Tinnevelly* were closed to grazing on account of incendiarism.

15. Rewards amounting to Rs. 890 were granted to informers and forest subordinates. The figure for the Central Circle has not been furnished; the Conservator states that rewards were sparingly granted in all districts except *Bellary* and *Chingleput*. Rewards amounting to Rs. 350 were paid to the Chentsus of Sudem, Pangidi and Rudracode in *Kurnool West* for protecting the forests from fire. Rewards in the shape of cloth were distributed to Chentsus in *Kurnool East* for assistance in putting out fires. A special officer has now been appointed to devise a scheme for the control of this wild jungle tribe by encouraging them to assist in the protection of the forests where they live and by educating the rising generation.

16. *Protection from fire.*—The system of fire protection adopted in most districts was the same as in the previous year, viz., the clearing of exterior and interior fire lines and patrol by fire watchers. In *Kurnool South* seven miles of fire line in Giddalore range were cleared by purchasers, thereby producing revenue instead of expenditure on such operations—a notable step in advance. The total area over which special protection was attempted was 6,384 square miles against 6,037 square miles in the previous year. Seven hundred and thirty-nine square miles out of the area attempted to be protected were burnt, the percentage of failure rising from 9·03 to 11·57. The cost per square mile successfully protected was Rs. 22–8–8 against Rs. 22–3–0 in the previous year. The measures taken to secure the co-operation of the hill tribes in *Lower Gōdāvari* and *South Coimbatore*, the Khonds in *Ganjām*, the Chentsus in *Kurnool* and the Malayalis in the Javadis to protect the forests from fire in return for rewards and grazing concessions are said to have produced satisfactory results. In the *Nilgiris* and *North Malabar*, protection is reported to have been poor, for single fires extending over 16,000 and 7,000 acres occurred which might have been checked by counterfiring had the staff been more vigilant. The necessary disciplinary measures have been taken, but it must also be said that in some districts the exceptionally dry season made the fires very destructive and extinction difficult.

In addition to the areas under special protection, the ordinary staff attempted to protect 9,096 square miles against 9,326 square miles in the previous year, of which 8,741 square miles were successfully protected.

17. The following statement compares the number and origin of the fires which occurred during the year with those of the preceding year.

	1912-13.		1913-14.	
	Number.	Area in acres.	Number.	Area in acres.
Fires originating in departmental fire conservancy operations.	45	23,601	81	17,065
Fires crossing exterior fire lines	166	52,494	183	226,029
Fires due to carelessness or accident	318	59,117	383	82,084
Fires originating from intention or malice	260	100,478	341	137,126
Fires due to unknown causes	637	428,379	762	253,976
Total ..	1,426	664,069	1,750	716,280

A detailed comparison of these figures is liable to lead to wrong conclusions. The areas given are necessarily approximate, though in special localities fire maps are kept and burnt areas are carefully estimated. The large increase in fires crossing exterior lines is caused by the inclusion in the returns of very large areas in *Upper Gōdāvari*, where real protection is only just being commenced and where extensive fires were the result of a severe hot weather. Experience is showing that in dry areas broad fire lines are essential, and in the three Kurnools lines of 100′ broad are being cut in places. Intentional fires were started in this district by the Chentsus of one *gudem* who were jealous of some better behaved Chentsus in a neighbouring *gudem* to whom a reward for fire protection had been given. Fire tracing in the huge Nallamalai block of 2,000 square miles of forest is a work of great magnitude, but very good lines of 60′ and 100′ have been cut. The forest is already responding to this treatment. The best example is in the Chelama range, *South Kurnool*, where the Southern Mahratta Railway passes through the hills. The whole range is well protected and the growth of teak, rose-wood and other good species is most encouraging.

18. *Protection from cattle.*—Three thousand two hundred and forty-two square miles or 16 per cent. of the total area of reserved forests and reserved lands (area 19,665 square miles) were closed to all animals throughout the year and 104 square miles for part of the year against 3,163 square miles and 280 square miles respectively in the previous year. Three hundred and eighty-seven square miles of reserved forests and reserved lands were open to goats against 683 square miles open last year and no goats were admitted either in reserved forests or reserved lands in any forest except in *Kistna*, *Bellary*, *Anantapur*, *Guntūr*, *Cuddapah*, *Vellore North*, *North Salem* and *Madura* and to a very limited extent in *Chingleput* and *Chittoor*. Goats alone were excluded over an area of 15,169 square miles and goats and sheep over 763 square miles against 14,752 and 489 square miles respectively last year. In accordance with the recommendation of the Forest Committee, the policy of excluding goats from reserves altogether is being given effect to. Goats have now been excluded from all the reserves in the Presidency except *Bellary*, *Guntūr*, and one reserve each in *Chittoor* and *Chingleput*. A grazing scheme for the *Nilgiris* was sanctioned by Government and has been introduced in the current forest year. A grazing scheme for the Udumalpet range of the *South Coimbatore* division was approved and is to take effect from July 1915. Collectors of other districts are preparing fresh schemes in connection with the classification of forests on the new lines.

The number of cattle impounded fell from 196,408 to 190,652 and the total number of animals licensed to graze on payment also fell slightly from 3,891,000 to 3,875,000. The stoppage of licenses for goats accounts largely for the total decrease. The Conservator, Southern Circle, gives an interesting table to show the grazing incidence in each district, based on the actuals of grazing permits. The calculation of grazing possibility for areas to be kept under departmental control is being taken up.

19. *Protection against injuries from natural causes.*—Spike disease continued its attacks upon sandal in *North Salem*, *Kollegal* and *North Coimbatore* and is reported to have spread to all sandal areas in the two latter divisions. The Nilambur teak plantations suffered severely from defoliators. A new moth trap is being tried, but it is as yet uncertain whether its effect can be otherwise than purely local.

Root-fungus attacked casuarina and Sissoo poles in a Bellary plantation; in *Lower Gōdāvari* casuarina attacked by root-fungus were removed and sold. The campaign against lantana was continued with indifferent success. From experiments in *North Malabar* it is reported that there is little or nothing in the theory that lantana can be kept down by growing castor-oil plants with it. Deer and sambur as usual caused some damage in many places.

(4) *Sylviculture.*

20. *Natural reproduction.*—Natural regeneration must depend largely on the season, and especially in the Southern and Western Circles and in *Gōdāvari* and *Kurnool* in the Northern Circle the long dry weather seriously affected growth. In *Ganjām*, however, the season was favourable and reproduction is reported to have been astonishing. In *East Cuddapah* where special measures are being taken to protect red sanders areas, the growth was good. The bamboo is seeding over wide areas in *South Canara*, *Malabar* and *Coimbatore*. The seeding period is spread over several years, and large patches of dead clumps mark the seeding of 1911 and 1912.

21. *Artificial reproduction.*—Three-hundred and fifty-five acres were added and 2,312 acres excluded from the area of regular plantations during the year, being a net decrease of 1,957 acres, the corresponding decrease in the previous year being 559 acres. In accordance with the present policy all plantation work is being given up, except for experimental purposes. Expenditure on cultural operations is also being curtailed. Teak plantations in *Kurnool* were started to train the Chentsus to some form of manual labour and will be discontinued as soon as their object is attained. There were no additions to the taungya plantations during the year and the Conservator, Western Circle, is of opinion that such plantations are a failure. The Board agrees with the Conservator that these operations may be discontinued. Cultural operations were carried on over a nominal area of 9,000 acres at a cost of Rs. 20,237 against 21,000 acres at a cost of Rs. 26,708 in the previous year, the decrease being general and marked in the Central and Western Circles. The areas given in form 75 are misleading. In *Chingleput*, for instance, 2,695 acres are shown as added for cultural operations. This figure relates to felled coupes which are said to have been ploughed and sown without cost to Government, but in the Conservator's opinion the operations were probably imaginary. Similarly in *Kistna* 728 acres are shown as culturally treated but sowings were chiefly failures. These operations are now being put a stop to and expenditure under this head will continue to decrease.

22. *Operations for the improvement of growing stock.*—The operations undertaken during the year consisted, as in previous years, of improvement fellings, thinnings, fencing, creeper-cutting, removal of inferior species, dead and dying trees, parasites and noxious growth and weeds.

23. *Experiments.*—Successful experimental cultivation was carried on in the following districts :—

Sandal in *Vizagapatam*, *Gōdāvari Lower*, *Kistna* and *Cuddapah East*; Red sanders in *Kistna*, *Vellore North* and *South*; *Swietenia mahogani* in *Cuddapah East*, *Nellore*, *Vellore North*, *Salem South*, *Madura*, *Malabar North* and *South* and parts of *South Canara*; *Dalbergia Sissoo* in *South Arcot* and *Vellore North*; *Acacia auriculiformis* in *Cuddapah West*, *Nellore*, *Vellore North* and *Salem*; *Hardwickia binata* in *Vellore North*; *Pinus longifolia* in *Vizagapatam*; *Swietenia macrophylla* in *Cuddapah East*, *Nellore*, *Vellore North*, *South Arcot* and *Malabar South*; Cera rubber in *Ganjām*; Divi Divi in *Gōdāvari Upper*, *Nellore* and *Chittoor*. The mahogani of both varieties grown at Nilambur is of a good size but is said to give no heart wood. Eleven varieties of eucalyptus were planted in the arboretum in Cairn Hill reserve, Nilgiris, but it is reported to be too early as yet to express an opinion on the result. This arboretum was inspected by the Forest Commissioner.

The following are other experiments conducted during the year :—

(1) Test of annual regrowth on scrub jungle in connection with cattle-browsing statistics—*Ganjām.*

(2) Test of the period and the method of removal of bamboo in timber forests—*Kollegal* and *Coimbatore South.*

(3) Experiment of clean weeding of swamp areas in order to make them fit for teak planting—*Malabar South.*

(4) Observations of the rise of teak stem during the process of growth—*Malabar South.*

(5) *Exploitation.*

24. *System of management—Major produce.*—The various methods of the exploitation of major produce were as in previous years, clear and regeneration fellings, thinnings, selection fellings, improvement fellings, and coppice fellings. Clear and regeneration fellings were carried on mostly in *Gōdāvari Lower*, *Kistna*, *Kurnool West*, *South Arcot*, *Trichinopoly* and *Tinnevelly*. Thinnings were carried out in the Nilambur teak plantations and in parts of *Gōdāvari Lower*, and *Kurnool East* and *West*. Selection fellings were carried out as usual in timber coupes or where it was found necessary to eliminate dead and unsound trees. Improvement and coppice fellings were undertaken to a large extent in most districts. Unregulated fellings under the permit system were made in some unreserves; in reserves this antiquated system was chiefly confined to the extraction of bamboos in *Vizagapatam*, *Gōdāvari Upper*, *Malabar North* and *South*, and *Coimbatore North* and *South*, of palmyra trees in *Kurnool West*, of small timber and fuel in the Rampa forests of *Gōdāvari Lower* and in the *Nilgiris*, and of timber for domestic requirements in two ranges of *Madura*.

25. *Minor produce and fodder grass.*—Minor produce was generally leased out. The manufacture of catechu in *South Canara*, and collection of miscellaneous produce in parts of the *Nilgiris*, *Coimbatore South*, *Kollegal*, *Coimbatore North*, *Gōdāvari Lower*, *Nellore*, *Trichinopoly* and *Tinnevelly* were carried out by departmental agency. Permits were issued in several districts for the removal of manure leaves, stones, gravel, etc. In the Kurnools, Chentsu agency was employed for the collection of minor produce. In *Ganjām* the enjoyment of fruit trees, mango and tamarind in the majority of cases was left free to the Khonds. Fodder grass was removed on permit in *Madura*, *Malabar South* and *Coimbatore* and was leased in *Kistna*, *Cuddapah West*, *Nellore* and *Salem North* and in parts of *Gōdāvari Lower*. In *Tinnevelly*, grass was, as in previous years, included in minor produce leases. Ryots were allowed to cut and remove grass free from reserves in the three *Kurnools*, *Bellary*, *Cuddapah East* and *West*, *Nellore*, *Chittoor*, *Vellore North*, *South Arcot* and parts of *Gōdāvari Lower* as also in *Anantapur* where however the concession was subsequently withdrawn as the neighbouring villagers did not help in putting out fires. In *Bellary* Mr. Howes cut and removed 250 tons of hay against 100 tons in the previous year and the Military Department took 1,567 tons against 839 tons in the previous year. Nearly 80 tons of grass are also reported to have been removed from *Anantapur* during the year by the Military Grass Farm, Bangalore.

26. *Hay-making.*—Experimental operations in hay-making were continued in *East Cuddapah* and *Guntūr*, and proved fairly successful in the former district. Government have recently passed orders agreeing with the Board that experimental hay-making operations need not be continued. Hay in small quantities was collected in *Kurnool South* for feeding Government bullocks, and in *South Canara* for sale at the cattle fair; there was however no demand at the fair. In *Vellore North*, the Banavaram reserve was leased out to the Military department on payment of a royalty of Rs. 2 per ton of made hay, and similar arrangements are being made in the Central Circle.

27. *Grazing.*—The revenue from grazing and fodder grass, Rs. 6,81,893, was less than in the previous year by nearly Rs. 10,000. There was a fall in the Northern, Southern and Western Circles, counterbalanced to some extent by an increase in the Central Circle. The decrease in the Southern Circle was due chiefly to closure of reserves to goat browsing in *North Vellore* and *Madura* districts, while that in the Northern and Western Circles was small and calls for no remarks. The decrease of Rs. 13,424 in the grazing revenue in *North Salem* Division has not been explained. The increase in the Central Circle was chiefly in *Bellary*, due to opening of closed areas in Alūr and Adōni ranges and in *Guntūr* to larger areas thrown open to grazing; in *East Cuddapah* also there was an appreciable increase owing it is said to the vigilance of the forest subordinates and the patrolling of the students of the Vernacular Training School during the early part of the grazing season.

28. *Agency of Exploitation.*—The subjoined table compares the outturn through all agencies of timber, fuel, bamboos and minor produce with that of the preceding year :—

Agency of exploitation.		Timber including sandalwood in c. ft.		Fuel in c. ft.		Bamboos in No.		Minor produce including grass and grazing value in rupees.	
		1912-13	1913-14	1912-13	1913-14	1912-13	1913-14	1912-13	1913-14.
By Government agency.	Northern Circle	323,766	280,305	1,460,144	1,459,059	4,046,737	882,151	10,628	10,750
	Central ,, ...	67,011	20,567	1,417,886	100,896	88,338	9,120	18,036	18,941
	Southern ,, ...	32,535	21,605	354,048	64,207	4,282	5,811	433	706
	Western ,, ...	286,927	256,604	2,071,673	1,634,965	206,909	158,545	25,647	28,229
	Total ..	710,239	579,081	5,303,751	3,259,127,	4,346,266	1,055,627	54,744	58,626
By purchasers.	Northern Circle	1,262,711	1,813,968	2,991,914	3,877,747	10,668,814	12,806,046	2,43,732	243,438
	Central ,, ...	1,396,145	1,585,381	4,208,548	5,688,506	1,683,357	1,766,649	9,41,935	6,92,586
	Southern ,, ...	983,229	964,871	6,259,365	6,579,693	12,660.892	20,760,430	5,07,871	4,29,093
	Western ,, ...	300,788	370,524	2,068,520	2,532,559	4,818.838	4,788,599	86,225	1,44,205
	Total ..	3,942,873	4,734,744	15,528,347	18,678,505	29,831,911	40,121,724	1,779,763	1,509,322
By right holders.	Northern Circle	807	189,507	154,806	792,444	12,293	80,953	24,582	24,649
	Central ,, ...	..	..	..	..	..	..	151	150
	Southern ,, ...	..	..	20	..	..	..	820	2,389
	Western ,, ...	33,386	49,077	28	..	1,392	1,210	721	856
	Total ..	34,193	238,584	154,854	792,444	13,685	2,1 63	26,274	28,044
By free grantees	Northern Circle	22,643	48,304	..	..	47,670	44,535	107	78
	Central ,, ...	58,117	84,180	20	.	24,950	14,775	1,836	2,457
	Southern ,, ...	32,276	47,810	104,201	26,689	26,441	6,568	10,316	3,677
	Western ,, ...	6,062	8,390	975	3,415	9,045	13,405	417	470
	Total ..	119,098	188,684	105,296	30,104	108,106	79,283	12,676	6,682
Grand total Presidency		4,806,403	5,741,093	21,092,248	22,760,180	34,299,968	41,338,797	1,873,457	1,602,674

29. There was a substantial increase in the output under all heads except minor produce. Timber, fuel and bamboos extracted by Government Agency decreased largely, all the Circles contributing, the only exception being the Southern in which there was a slight increase in the number of bamboos cut, while the amount of timber, fuel and bamboos removed by purchasers increased more largely. This change is the direct result of the substitution of contract for departmental working. Other minor reasons are assigned :—

The fall in the quantity of timber removed by Government Agency in the Southern Circle is ascribed to smaller quantity supplied to the Remount Depot in *Salem North*, and in the Western to postponement of felling in Begur coupe, *North Malabar*, and to the stoppage of improvement fellings in Mudumalai Working Circle, the *Nilgiris*, owing to the previous year's stock remaining unsold. There was an increase in the quantity of timber removed by purchasers in all circles except the Southern where there was a slight fall. In the Northern the further reason assigned for the increase is the increased sale of trees on darkhast lands by the Revenue Department, and in the Western increased demand for miscellaneous timber in *South Canara*—the sale of reserved trees having been stopped — and the sale of uprooted and wind-blown trees in *South Malabar*.

The fall in the quantity of fuel removed by Government Agency in the Western Circle is said to be partly due to a large stock of previous years' fellings remaining undisposed of. The increase in the quantity of fuel removed by purchasers in the Southern Circle is ascribed to a larger number of coupes worked in *South Salem* and *Madura*.

There was a decrease in the number of bamboos cut by Government Agency in all Circles except the Southern where the increased outturn was owing to a large number of bamboos having been felled in *South Arcot* and *Tinnevelly* for departmental works. The decrease was marked in the Northern Circle where it fell from 4,046,737 to 882,151. In the Western Circle there was absence of demand in *Kollegal* and hence the decrease. There was an increase in all Circles except the

Western in the quantity of bamboos cut by private agency. In the Southern Circle the increase was due to larger yield from coupes leased in *North Vellore* and to larger areas worked in *South Salem* consequent on the change of rotation from 5 to 3 years; in the Western Circle, the decrease was chiefly in *Central Coimbatore* due to the working out of all accessible areas in previous years.

30. The value of minor produce extracted departmentally increased in all Circles. The increase is small and calls for no remarks. The value of minor produce removed by purchasers decreased in all Circles except the Western. In the Central Circle, the decrease was chiefly in *Nellore* due to fall in the revenue on Amaroy produce, while in the Southern, it was due to fall in the amount of grazing revenue on account of closure of areas to browsing in *North Vellore* and *Madura*, to free removal of metal by Local Fund contractors, and to fall in the lease amounts for miscellaneous leases; the decrease in the Northern Circle was small and calls for no remarks. The increase in the Western Circle has not been explained.

31. The estimated value of forest produce removed by right holders was Rs. 59,978 against Rs. 41,517 and that granted free Rs. 24,959 against Rs. 28,562.

(6) *Financial results.*

32. The following statement exhibits the financial results of the year as compared with those of the previous year and with the average of the preceding five years:—

Expenditure.

Years.	Revenue.	A. Conservancy and Works.	B. Establishment.	Total.	Surplus.
1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.
1913–14	40,48,842	12,62,460	14,78,482	28,40,942	12,07,900
1912–13	41,18,771	15,55,534	14,86,623	30,42,157	10,76,614
Average for the five years preceding 1912–13.	40,39,801	18,65,190	13,50,297	32,15,487	8,24,314

Both the revenue and expenditure of the year show a decrease as compared with the figures of the previous year. The expenditure under "A. Conservancy and Works" decreased by nearly two lakhs. The net result was a surplus of over twelve lakhs which is the highest on record. As pointed out last year the change from departmental to contract working is producing satisfactory results. All Circles contributed to the surplus. The Southern Circle stands first with a surplus of 6·44 lakhs, the Central Circle next with 4·73 lakhs, Northern and Western Circles showing a surplus of ·45 and ·46 lakhs respectively. It is satisfactory to note that the Northern Circle has converted last year's deficit of ·62 lakhs into a surplus.

33. The fall in gross revenue occurred chiefly under "Timber" (removed both by Government agency and purchasers) and "Sandalwood" by Rs. 27,956 and Rs. 1,19,495 respectively. The decrease under "Timber" occurred in all Circles except the Northern. It is reported to be due in the Central Circle to the discontinuance of departmental operations, in the Southern to less collection of value of trees on darkhast land in *South Vellore* and to non-sale of timber coupes during the current year in *Madura*, and in the Western to smaller outturn of plantation teak logs in *South Malabar*. The decrease under "Sandalwood" occurred chiefly in the Southern Circle on account of non-disposal of about 110 tons of sandalwood due to low prices offered and to some extent in the Western Circle to non-felling of certain areas in *Kollegal* for want of establishment and to the fact that the sales of 1912–13 were inflated by realizations of unsold stock of previous years. The realizations under sandalwood in 1912–13 were unusually high, but steps are being taken to secure a good market for this valuable wood in the future and the receipts will certainly increase.

This decrease under timber and sandalwood was to some extent counterbalanced by increased revenue amounting to Rs. 86,593 under "Grass and other minor produce" which occurred mainly in the *Central* Circle and to a smaller extent

in the *Western*. In the former circle, it was due to the collection of five instalments of tangedu bark (*Cassia auriculata*) during the year as against three in the previous year, to leasing the collection of bark from some closed areas, and to larger realizations of Amaroy sales in *Bellary*; to increased revenue from Tangedu bark lease in *Anantapur* and *Guntūr*; and to better prices obtained for produce on unreserved lands in *Chittoor*. In the Western Circle, it was due to better prices realized for leases of miscellaneous produce in all districts except the *Nilgiris* and *Central Coimbatore*.

34. The expenditure under "A. Conservancy and works" decreased mainly, by Rs. 24,928 under "I (*a*) Timber," Rs. 21,361 under "I (*c*) Bamboos," Rs. 58,147 under "I (*b*) Firewood," Rs. 29,515 under "VII (*b*) Buildings", and Rs. 67,280 under "VIII (*e*) Sowing and Planting". The decrease occurred in all circles and was due to the change from departmental to contract working. In the Northern and Central Circles it was also due to curtailment of expenditure on roads and buildings, and in the latter circle (in which there was a decreased expenditure of nearly one lakh or about 50 per cent. of the amount by which expenditure decreased in all circles together) it was further due to the curtailment of cultural operations in *Bellary* and *Anantapur*. As to the decrease under "Establishment" it is noticed that in the Northern Circle expenditure under this head decreased by Rs. 36,661 due to the services of the Vizianagram Forest Settlement Officer and his establishment having been dispensed with and to the posting of junior officers to the circle. This was, however, counterbalanced by increased expenditure in other circles owing to the entertainment of additional Deputy Rangers sanctioned during the year, to the revision of pay to Range clerical establishments and to the grant of local allowance to subordinates in the Southern and Western Circles.

35. The following statement shows the financial results of the year after deducting capital expenditure not yielding an immediate outturn:—

	Rs.
Gross revenue	40,48,842
Value of produce removed by right holders and free grantees	84,937
Total ...	41,33,779
Gross expenditure	28,40,942
Deduct—Expenditure not yielding an immediate outturn—	
(1) Communications and buildings	3,36,438
(2) Cultural operations	1,03,047
(3) Working-plans	3,199
(4) Settlement	18,750
(5) Surveys { Local	30,097
(5) Surveys { Imperial	7
(6) Demarcation	28,429
Total ...	5,19,967
Balance of direct revenue producing expenditure	23,20,975
Surplus of revenue over expenditure directly chargeable to revenue	18,12,804

36. *Administration.*—Mr. W. O. Horne, C.S.I., was head of the Forest Administration up to the 29th September and was succeeded by the Hon'ble Mr. R. C. C. Carr who was Forest Commissioner for the rest of the year. Mr. Horne toured in *Anantapur*, *Gōdāvari*, *Kistna*, the *Nilgiris* and *Coimbatore* districts. At Cocanada he discussed with the Collector, the Divisional Officer and the District Forest Officer a scheme for protecting and improving the Rampa forests; in the *Nilgiris* he was engaged in scrutinizing the provisions of a new working-plan for the reserves of that district; in the other districts general inspection was conducted. The Hon'ble Mr. Carr toured in *North Arcot*, *Chingleput*, *Nellore*, *Trichinopoly*, *Tanjore*, *Coimbatore*, *Salem*, *Kistna*, *Cuddapah*, the *Nilgiris*, *Madura* and *Chittoor*. The tour in the eight districts first mentioned was primarily in connection with the introduction of forest panchayats; besides conferring with local officers, the Commissioner himself visited many reserves in order to explain clearly the lines on which classification should be conducted and to ascertain by local enquiry the possibility of starting panchayats. In *Central Coimbatore* he inspected with the

Collector fifteen small reserves in the Erode taluk in several of which panchayats have since been started. In *Trichinopoly* he inspected the padugais on the Cauvery and Coleroon rivers and discussed with the Conservator and Collector the question of their future management. In *Cuddapah*, the Kodur forests were inspected particularly in connection with the timber improvement system recently introduced for the valuable Red Sanders areas. On the *Nilgiris* he visited several reserves in connection with a proposal to hand them over to the Government Cinchona Department for cinchona planting and discussed with the Collector certain questions relating to the acquisition of the Mudumalai and Kombarakolli reserved forest. In *Madura* he made special enquiries about the supply of fuel to Madura town and with the Conservator and District Forest Officer inspected a large portion of the Palni hills, chiefly with a view to considering the question of annual grass fires on the Ampthill downs. In *Coimbatore* he visited the proposed Thadagum-Anaikatti road leading to the Attapadi valley and discussed the details of the Anamalai township. He presided over the meeting of the Board of Visitors of the Forest College at Coimbatore from the 27th to 31st March 1914 to discuss various questions relating to the work of the college. The proceedings of the meeting are now before Government.

37. Mr. A. W. Lushington, Mr. H. B. Bryant and Mr. J. S. Battie were in charge of the Northern, Central and Southern Circles respectively throughout the year. Mr. F. A. Lodge, C.I.E., held charge of the Western Circle up to 3rd February 1914 when he went to Hyderabad as Inspector-General of State Forests and has since retired. Mr. McCarthy held charge of the circle for the rest of the year. The Conservators of the Northern, Central and Southern Circles visited all districts in their charge and inspected all District Forest offices under their control. The Conservator, Western Circle, visited all his districts except *Malabar South*, *Kollegal* and *Coimbatore North* and *South* and inspected all the District Forest offices except the *Nilgiris*, *Kollegal* and *Coimbatore North* and *Central*. All District Forest Officers except those of *Gōdāvari Upper* and *Malabar North* and *South* spent sufficient time in touring; the short touring has been satisfactorily explained. All Range offices except one each in *Kurnool East*, *Cuddapah West*, *Kollegal* and *Coimbatore North* and two in *Nellore* were inspected by District Forest Officers or their assistants. The accounts of District Forest offices except those of *Gōdāvari Lower*, *Kurnool East* and *West*, *Anantapur*, *Cuddapah*, *East* and *West*, *Malabar North* and *Kollegal* were scrutinized by auditors from the Accountant-General's office and the results were reported to be generally satisfactory. The Assistant Accountant-General inspected the accounts of the offices of *Coimbatore North* and *Central*.

38. The most important event of the year was the issue by Government of orders on the Forest Committee's report, and the subsequent introduction of the definite policy advocated by the Committee. At the same time orders were issued on the suggestions contained in a valuable report by Mr. Beadon Bryant, Inspector-General of Forests, who had been requested to visit this Presidency and to advise on forest administration. Mr. Beadon Bryant's report is especially valuable, as providing an expert analysis of forest working in Madras, as compared with similar work in other Provinces. Many of his suggestions coincided with those made by the Forest Committee, and the result has been the enunciation of a definite policy for future guidance.

An outline of the Forest Committee's proposals was given in last year's report. Briefly stated they suggested the regular classification of all forests into specified classes with a view to separating those areas in which scientific working and control are essential from areas required mainly for the supply of village requirements. For the latter areas it is proposed to introduce a system of village control, wherever panchayats or local committees of resident cattle owners can be found to undertake this duty. The first step for the introduction of this policy is naturally the classification of the forests. The system was started at first in seven selected districts, all of which were visited by the Forest Commissioner, as already stated. In six of these districts, viz., *Chingleput*, *South Salem*, *Central Coimbatore*, *Trichinopoly* cum *Tanjore* and *Kistna*, sanction has already been accorded for the starting of panchayats during the current year. Rules for panchayat administration were drawn

up and received the sanction of Government. Classification is now proceeding in all districts of the Presidency, and it is hoped that the panchayat system will shortly be extended everywhere.

As a result of this sifting process, many small reserves and plantations are being disafforested. It has been decided that small scattered reserves should only be retained in the category of reserves if a local panchayat can be found to look after them. Plantations are being sold wherever there is no special reason for their retention. The process of sorting out the less valuable areas is, however, a slow one demanding careful enquiry in every case and in most cases personal inspection by Forest and Revenue officers. Similarly the introduction of panchayats must necessarily proceed slowly and cautiously. At the commencement of the current forest year, some fifty panchayats in eight districts had been ordered to be started, the reserves to which they relate covering a total area of about 24,000 acres.

In accordance with Mr. Beadon Bryant's recommendations proposals for the reorganisation of the Forest department were called for, and were submitted during the year under report. These proposals deal with the controlling, executive and protective staffs, and involve a considerable increase in the annual expenditure. It was pointed out by Mr. Beadon Bryant that a low proportion of expenditure to revenue could not be considered as a sign of satisfactory forest management. In his opinion the establishment entertained on the forests of Madras was often totally insufficient for proper working and protection, for the regulation of grazing and for the economical carrying out of improvements. Forest districts, ranges and beats were in many cases found to be too extensive for efficient management, while the existing staff is inadequate to fill even the present scale of appointments. The reorganisation proposals now before Government are devised to meet these objections and in each district detailed enquiries are being made as to the redistribution of charges.

A scheme for the protection of the Rampa forests in the *Gōdāvari* district was sanctioned during the year. Sanction was accorded by Government in March 1914 for the acquisition of the Mudumalai and Kombarakolli leased forests in the Nilgiri district and the matter is now before the Special Acquisition officer. The application of Messrs. Nelson & Co. for the establishment of a Bamboo pulp factory on the West Coast was considered and the matter is under negotiation. Mr. A. W. Lushington's book entitled " A List of trees, shrubs and woody climbers found in the forests of the Madras Presidency " is in the press, and will, it is hoped, be issued shortly.

39. The Board notes with pleasure the remarks made by Conservators on the good work done by the officers under their control, and would add its own appreciation of that work and of the work done by the Conservators themselves. The retirement of Mr. F. A. Lodge has already been referred to. The Board desires to place on record its cordial appreciation of the services rendered to the Madras Forest Department by Mr. Lodge during a period of 30 years. It may be noted that during that period the department rose financially from an annual gross revenue of less than 12 lakhs to a net surplus of over 12 lakhs. During the year the title of Rai Sahib was conferred on Mr. Maduranayagam Pillai, Extra Deputy Conservator, in recognition of his good work in the department.

40. *The Madras Forest College, Coimbatore.*—Mr. F. C. L. Cowley Brown was Principal of the College from 1st July 1913 to 19th August 1913 and from 23rd February 1914 to 30th June 1914 and Mr. R. D. Richmond from 20th August 1913 to 22nd February 1914. Mr. A. Wimbush was Imperial Instructor of the College from the beginning of the year until 5th June 1914 when his services were placed at the disposal of the Government of India for employment as Instructor, Forest College, Dehra Dun. The first batch of trained rangers passed out of the College during the year after completing the two years course of training, three receiving Honors certificates, 17 the Higher Standard and three the Lower Standard certificates. The Forest Commissioner presided on the occasion. During the year under report 33 students entered the College on 1st July 1913 for the 1913–15 course. Out of these four (two Government and two private students) were withdrawn from the College for various reasons leaving 29 in residence on 30th June 1914. The Forest Commissioner and the Conservator of Forests, Western Circle, visited the combined camp of both divisions.

at Bolampatti where the senior division students were engaged in the final survey practical examination. The Forest Commissioner accompanied by Mr. Lodge also visited the camp at Octacamund in May. The new buildings for the College are approaching completion and will, it is hoped, be occupied during the current year. In the meantime the students and Professors are occupying buildings temporarily provided for them in Coimbatore. The Board of Visitors met at Coimbatore at the time of the final examination of the first batch of Rangers. Mr. Lodge has generously founded a prize in the College for the encouragement of Engineering which will be known as the "Lodge" prize. The "Indian Forester" has also been good enough to place with the Principal a sum for the foundation of a prize for a subject to be selected by the Principal in the spring term. During the senior division tour in Cuddapah a prize for the best essay on Red Sanders was kindly offered by Mr. T. A. Whitehead and was won by student C. S. King.

The College continued to do good work and the whole staff worked with great energy.

41. *General.*—The working of the timber and sandalwood transit rules was generally satisfactory. Large thefts of sandalwood were detected in *South Canara* and in order further to safeguard the interests of Government a draft set of rules to regulate the transit of sandalwood were prepared and submitted to Government. These rules have been referred back to the Board for further report.

The privileges allowed by the rules under section 26 of the Forest Act were generally availed of by the people and there were no complaints of any importance.

With reference to paragraph 20 of the orders of Government on the Forest Committee's report, regarding the opening of small coupes adjoining the villages where there is an effective demand for fuel, the Conservator, Central Circle, reports that for want of demand no small coupes have yet been opened, and that an attempt made in *Anantapur* to sell a coupe standing proved a failure; the Conservator, Northern Circle, reports that the reduction of size of coupes in *Kurnool West* is under consideration; the Conservator, Western Circle, states that in *Coimbatore Central and South* the subject is under investigation and that there is at present no demand for such coupes in other districts; the Conservator, Southern Circle, has not reported specifically on this point. The matter is being carefully borne in mind but experience at present shows that villagers will not, as a rule, pay for fuel. The real question of the moment is the supply of fuel to towns.

The orders of Government that adequate allotments should be made for improving the water supply in Government grazing grounds when drawing up the annual plan of operations in every range and that special mention should be made in the annual administration report of the success of the measures adopted, were received at the close of the forest year and have been noted for compliance.

The patrol system recommended by the Forest Committee has been actually introduced in *Vizagapatam*, *Gōdāvari Lower*, *Kistna*, *Kurnool South*, *North Vellore*, *South Arcot*, *South Salem* and *Tinnevelly*. The Conservators, Central and Western Circles, have not reported on this point but the system is being widely introduced, and will be greatly extended. It will in this way be possible to dispense altogether with the watchers, on whom has hitherto been imposed the duty of guarding reserves. These watchers are poorly paid and are temporary servants, and in the nature of things friction was set up between them and the villagers who desired to utilise the products of the forest. The advice given by the Forest Committee is bearing fruit and the change of system will, it is hoped, bring about a happier result. It is the aim of the department to work for the people and with the people, and to induce the people themselves to assist in the beneficent work of forest conservancy.

42. A memorandum of minor discrepancies found in the Circle reports is appended.

(True Extract.)

W. G. McFARLAND,
Secretary.

To the Secretary to Government, Revenue Department.

APPENDIX.

Northern Circle.

(i) *Appendix D, page IV of the Appendices*—

The figures 19,05 entered in column 17 against total is a mistake for 19,057.

(ii) *Form No.* 65, *page XI of the Appendices*—

The figure 8·67 in the last column but one against total, Kurnool West, is a mistake for 867.

(iii) *Form No.* 67, *page XIV of the Appendices*—

In the districts of Gōdāvari Lower, Kistna and Kurnool West, the totals of columns 3 and 4 of the return do not agree, as they should, with column 5 of the previous year's return at page XXX of appendices to the report for 1912–13 as shown below :—

	Columns 3 and 4 of the return.	Column 5 of previous year's return.
Gōdāvari Lower	784	793
Kistna	605	617
Kurnool West	930	918

The discrepancies should have been explained by adding a foot-note to the return — *vide* paragraph 5 of B.P. Forest No. 146, dated 26th May 1903.

(iv) *Form No.* 68, *page XV of the Appendices*—

The entire cost of surveys in the three divisions of Kurnool up to the end of 1912–13 is shown in column 30 of the return at page XXXIII of the Appendices to the Report for 1912-13 as Rs. 19,926. In column 28 of the return for this year, it is entered against the three Kurnool divisions as Rs. 68,869, 53,268 and 46,383 which works out to Rs. 1,68,520. The discrepancy has not been explained.

(v) *Form No.* 71, *page XXII of the Appendices*—

(*a*) One case of "injury to forests by fire" is omitted in column 3 against Kurnool West under class A.

(*b*) One case of "injury to forest by fire" shown in column 3 against class A in Vizagapatam district is not accounted for in the Appendix to the form printed at page XXVIII of the Appendices.

(vi) *Form No.* 76, *page XXXVI to XLI of the Appendices* –

(*a*) The figure 175,22 entered in column 7 against Reserved Forests—Miscellaneous in the Vizagapatam district is a mistake for 175,224. (*b*) The figure 3,396,496, in column 14 against Total—Kurnool West is a mistake for 3,396,463. (*c*) The figure 12,813 in column 16 against Total—Reserved forests at page XXXIX at the Appendices is a mistake for 12,313.

(vii) *Form No.* 79, *page XLIV of the Appendices*—

The discrepancy between the closing balance of the previous year, exhibited in columns 6 to 8 of the statement printed at page CXIV of the Appendices to the Report for 1912–13 in the districts of Kurnool East and Vizagapatam, and the opening balance in columns 3 to 5 of the statement for the year under report in those districts has not been explained.

Central Circle.

(i) *Form No.* 69, *page XII of Appendices*—

The area of the Kavali Working Plan, Nellore district (49·59 square miles) sanctioned in Board's Proceedings Forest No. 122, dated 23rd June 1914, should have been shown in column 3 against Nellore district.

Southern Circle.

(i) *Form No.* 69, *page XIV of the Appendices*—

One square mile disafforested out of the area of 205 square miles in Trichinopoly *cum* Tanjore, shown in column 3 of the statement, should have been deducted in column 6 or 7, as the case may be, so that the total of the figures in columns 2 to 7 may equal the figure in column 8.

(ii) *Form No.* 70, *page XIX of the Appendices*—

The figures 727¼ and 73,289 entered in columns 11 and 12 against ghat-road under total, Southern Circle are mistakes for 27¼ and 3289.

(iii) *Form No.* 75, *page XXXIII of the Appendices*—

The figure entered in column 11 under total of cultural operations, viz., Rs. 8,947 is a mistake for 8,479.

(iv) *Form No.* 80, *page XLI of the Appendices*—

The figure 7,14 in column 10 under II "(*d*) Grazing and fodder grass" is a mistake for 7,614.

Western Circle.

(iv) *Form No.* 83, *page XLVI of the Appendices*—

The total charges entered in the last column, viz., Rs. 7,92,041 do not agree with the grand total of expenditure A and B, viz., 7,84,852, shown in column 11 of the statement at page XLIV of Form No. 80 furnished by the Accountant-General.

SUMMARY OF PROGRESS OF FOREST ADMINISTRATION IN THE MADRAS PRESIDENCY DURING THE FIVE YEARS 1909-1910 TO 1913-1914.

The following is a summary of the progress made in Forest Administration in the Madras Presidency during the quinquennium ending with the year 1913-14.

2. *Administrative control.*—The control of the forest branch of the general administration continued to remain in charge of the Forest Commissioner of the Board of Revenue. Mr. W. O. Horne, C.S.I., was Forest Commissioner for about three years and the Hon'ble Mr. R. C. C. Carr for six months in 1911 and from the 30th September 1913 to the end of the quinquennium. Messrs. C. J. Weir, J. Andrew, E. Scott and R. B. Clegg held charge for short periods. The question of appointing a Chief Conservator of Forests to control the Forest Administration of the Presidency in the place of the Forest Commissioner of the Board of Revenue is under the consideration of Government.

3. *Changes in the controlling charges.*—At the beginning of the quinquennium the Presidency consisted of three circles the Northern, Central and Southern, comprising 9, 11 and 8 Forest districts respectively. A fourth circle the Western, was formed in October 1911 and the districts were redistributed; each circle comprises at present 8 Forest districts. The formation of two new districts, one in Gōdāvari and the other in South Canara, was also sanctioned during the quinquennium. There was a small addition to the area under control by the transfer of three taluks of the Central Provinces to the Upper Gōdāvari district of the Northern Circle in July 1909.

4. *Forest legislation.*—No forest legislation was sanctioned during the period under review. A Bill for the delegation of certain powers to the Board of Revenue and to invest the Local Government with power to disafforest reserves has recently been passed by the Legislative Council.

5. *Forest administration.*—One outstanding feature of the period under review was the development of the policy of transferring the exploitation of forests from departmental to contract agency. At the beginning of the quinquennium departmental working was the rule and at the end the exception, being now practically confined to places where suitable contractors are not found or where the value of the produce renders departmental working desirable. The change has been abundantly justified by results. The Inspector-General of Forests in his note on Forest Revenue and Expenditure in this Presidency expresses his strong approval. The establishment now have time to attend to their more legitimate duties instead of being employed on the fruitless task of inspecting and checking depot stocks and accounts. The change is also more and more tending to secure a larger net return from the forests. The following figures for Revenue and Expenditure under "I (*a*) timber" and "I (*b*) firewood and charcoal" removed by Government agency and "II (*a*) timber" and "II (*b*) firewood and charcoal" removed by private agency for the past five years show how far this has been realized :—

	1909-10.	1910-11.	1911-12.	1912-13.	1913-14.
RECEIPTS.	RS.	RS.	RS.	RS.	RS.
Government Agency.					
I. (*a*) Timber	3,45,865	2,59,572	3,63,970	3,43,502	2,74,157
(*b*) Firewood and charcoal	8,84,199	8,87,073	7,68,516	2,78,738	1,46,036
Total	12,30,064	11,46,645	11,32,486	6,22,240	4,20,193
Private Agency.					
II. (*a*) Timber	2,74,419	2,02,604	2,79,002	3,51,266	3,92,655
(*b*) Firewood and charcoal	3,75,649	3,87,896	5,08,814	6,67,992	7,91,394
Total	6,50,068	5,90,500	7,87,816	10,19,258	11,84,049
CHARGES.					
Government Agency.					
I. (*a*) Timber	99,785	84,581	94,509	81,393	56,465
(*b*) Firewood and charcoal	6,06,794	5,32,426	4,51,167	1,51,783	93,636
Total	7,06,579	6,17,007	5,45,676	2,33,176	1,50,101
Private Agency.					
II. Timber and other produce	1,26,500	1,17,313	1,21,717	1,30,245	1,29,449

6. Another important feature of the period was the appointment of the Forest Committee. A committee of official and non-official members with the then Forest Commissioner, Mr. W. O. Horne, as President, was appointed by the Local Government in June 1912 to consider and report upon all matters connected with the regulation of grazing and the supply of fuel and leaf manure, to state whether in these respects the reserved forests in this Presidency had failed to satisfy the wants of the agricultural population, and if so, to suggest any remedies they might consider desirable. The committee after visiting several typical districts and after recording the evidence of a large number of witnesses of all classes formulated their proposals. The principal recommendations were that all forests should be regularly classified into specified classes with a view to separating those areas in which scientific working and control were essential from areas required mainly for the supply of village requirements and that the latter should be placed under the control of village panchayats or local committees. Government have generally approved these proposals and classification is now proceeding in all districts of the Presidency. So far some fifty panchayats in eight districts have been ordered to be started. As the system extends, it is hoped that the interference of lowpaid subordinates in the daily life of villagers will be minimised and the main cause of friction between the forest department and the public removed. As regards fuel and leaf manure, the committee endorsed the policy already adopted by Government of transferring fuel exploitation to private agency and of stimulating the growth of green manure crops by ryots.

7. *Organization.*—The period under report was marked by an increase in the controlling forest service necessitated by the rapid development of the forests in the Presidency, the redistribution of districts under Sir William Meyer's scheme, the sub-division of heavy districts into two or more forest divisions and the establishment of the Forest College at Coimbatore. The service was accordingly reorganized in 1911 with the result that three posts were added to the Imperial Forest Service (including one Conservator for the additional circle) and 14 to the Provincial Forest Service (1 Extra Deputy Conservator and 13 Extra Assistant Conservators of Forests). During the same year the time scale was introduced for the whole controlling staff excluding Conservators for whom fixed grades of pay were provided. The subordinate forest service and the clerical establishments were also improved to some extent during the quinquennium. The Board has recently submitted to Government proposals for a further complete reorganization of the controlling and the subordinate forest services of the Presidency both of which the Inspector-General of Forests, Mr. Beadon Bryant, on a visit paid in December 1912, found to be undermanned and overburdened.

8. *Changes in area.*—The area under control remained practically unaltered and covers 13·8 per cent. of the total area of the Madras Presidency excluding feudatory and tributary states. The figures are given below :—

	At the commencement of the period.	At the close of the period.
	SQ. MLS.	SQ. MLS.
Reserved forests	18,694	18,863
,, lands	876	802
Total ...	19,570	19,665

9. *Forest Settlement.*—Forest settlement is practically complete in this Presidency. The slight difference in the reserve area, noted above, is due to corrections of area, disafforestation, etc.

10. *Demarcation.*—The total length of artificially marked boundaries at the end of the previous quinquennium was 35,331 miles and is now 34,454 miles. There was a large decrease in Coimbatore due to alterations made in forest boundaries by the Special Deputy Collector appointed for the purpose.

11. *Forest Surveys.*—An important change was effected by the Government of India in entrusting forest surveys to the topographical parties of the Survey of India and reducing the general scale of surveys from 4″ to 2″ to a mile. The cost of surveys on the 2″ scale included in the sanctioned topographical programme is borne by the Survey of India, but where they are not so included or where surveys on a large scale are required, the cost is debited to the Forest department. At the

instance of the Board of Forestry lists of forest areas for survey on the 4″ scale were drawn up and distinguished from those which had been surveyed on the 2″ scale and those which had not been surveyed at all. Lists of reserves to be surveyed on the 4″ scale were submitted to the Government of India in G.O. Mis. No. 1062, Revenue, dated 8th April 1914. During the quinquennium, the Survey of India party surveyed topographically an aggregate area of 414 square miles, besides resurveying 139 square miles.

12. *Working-plans.*—During the quinquennium working-plans were compiled for 8,091 square miles against 7,207 in the previous quinquennium. Greater progress would have been made in this direction had the staff of officers been adequate. The Board has applied to Government for the employment of a Working-plans Officer for each circle, and also a Central Working Plans Officer to ensure control in the actual working of sanctioned working-plans.

The present forest policy of relaxing the hold over small scattered reserves, fuel plantations and degraded areas, of concentrating attention on major reserves will involve the overhauling of many, if not all, working-plans already framed. Moreover the working-plans included in the above figures are often preliminary schemes intended to pave the way for the formation of more regular plans by a fully trained and experienced officer.

13. *Communications and buildings.*—The average annual expenditure on communications, buildings and other works amounted to Rs. 3,19,000 during the period under review as compared with Rs. 1,70,000 during the previous period. Nearly two-thirds of the increase was in respect of new works required for opening up the forests and for providing the staff with rest-houses and quarters.

14. *Forest offences.*—The average annual number of forest offences rose to 28,500 from 23,600 during the previous quinquennium. Cases of injury to forests by fire increased from 630 to 1,104 and offences of unauthorised felling and grazing increased from 14,003 and 7,791 to 17,574 and 8,634, respectively. There was a slight fall in the number of other offences.

With an improved staff for which proposals have been submitted to Government, the abolition of watchers and the substitution of the patrol system as recommended by the Forest Committee, and the introduction of the panchayat system, considerable improvement may be looked for. The energies of the staff are being directed towards prevention of offences rather than to detection. But it is possible that the total number of offences brought to book may not show any immediate decrease, for at present many offences occur which are not detected. The whole tendency of the present policy, however, is to reduce friction between the people and the department, and the ultimate result must be a decline in forest crime.

15. *Fire-protection.*—The average area under systematic fire protection amounted to over 13,000 square miles. In the previous period, the area was 7,000 square miles.

16. *Protection from cattle.*—The regulation of grazing in forest areas was one of the main points considered by the Forest Committee. In accordance with their recommendations it is proposed to limit the number of cattle to be admitted into the reserves set apart for scientific working and to leave the control over other areas in the hands of villagers where local committees of resident cattle-owners can be found to undertake the duty. Under this arrangement, really important forests will be protected from indiscriminate grazing and at the same time the requirements of the villagers will be largely satisfied. During the period under review, the average area annually open to cattle other than browsers decreased by 1,500 square miles or about 9 per cent., and that open to browsers by 200 square miles or about 25 per cent.; the average areas open each year (during the quinquennium) being 16,000 and 700 square miles respectively. The average number of animals admitted to graze on payment of fees increased from 3,717,000 in the previous quinquennium to 3,783,000 in the period under review. Of the former number 195,000 and of the latter 233,000 were browsers so that there was an increase of nearly 20 per cent. in the number of animals of this class admitted to pasture It may, however, be noted that the policy of Government has been to exclude goats from reserved areas as evidenced by the great fall in the number of goats allowed to graze in forests from 327,000 in 1909–10 to 172,000 in 1913–14. The Forest Committee endorsed this policy and the total exclusion of the goat from any area where conservation of tree growth or pasture is attempted is being firmly insisted upon.

17. *Yield and return.*—The following statement shows the average annual outturn of the forests for the two periods :—

—	Timber and fuel.	Bamboos.	Minor produce value in
	C. FT.	NO.	RS.
1904-05 to 1908-09	24,235,000	36,757,000	14,87,000
1909-10 to 1913-14	26,554,000	40,306,000	16,30,000

The average annual outturn under each of the above heads increased by about 9 per cent.

18. *Financial results.*—The average annual financial results of the last two periods were as follows :—

—	Revenue.	Expenditure.	Surplus.
	RS.	RS.	RS.
Average for 1904-05 to 1908-09	33,74,000	24,86,000	8,88,000
1909-10	41,84,203	33,84,927	7,99,276
1910-11	37,71,940	32,18,552	5,53,388
1911-12	42,37,795	34,46,441	7,91,354
1912-13	41,18,771	30,42,157	10,76,614
1913-14	40,48,842	28,40,942	12,07,900
Total for the period 1909-10 to 1913-14 ..	2,03,61,551	1,59,33,019	44,28,532
Average for 1909-10 to 1913-14	40,72,000	31,86,000	8,86,000

The average gross revenue rose by nearly 7 lakhs of rupees but expenditure increased by the same amount and the surplus was practically the same as in the previous period. During the last two years of the quinquennium, however, the surplus was considerably larger and the final surplus of over 12 lakhs was the highest on record It is worthy of note that in 1885 the gross revenue was under 12 lakhs. The change from departmental to contract working caused at first a decline in revenue, but private agency is developing rapidly and as shown in paragraph 5 *supra* the results are most encouraging.

19. *Forest education.*—The Madras Forest College for the training of Rangers was opened at Coimbatore on the 1st July 1912. The College has a hostel attached to it and is manned by a Principal assisted by four Instructors. The deputation of students to Dehra Dun for the Ranger's course is no longer necessary and it will hereafter be possible to obtain a greater choice of candidates for Rangers' appointments and to secure men of superior qualifications. The first batch of trained Rangers passed out of the College in March 1914 after completing the full course of nearly two years' training.

The Gass Forest Musuem at Coimbatore opened in 1902, continued to attract a large number of visitors. It is a valuable adjunct to the Forest College.

The School for the training of Deputy Rangers and Foresters at Coimbatore was abolished and in its place annual vernacular training schools with a six months' course have been established for the training of Foresters and Forest Guards. There is one school for each circle.

Research.

20. There are no special Research Officers in this Presidency. The Board has addressed Government for the employment of a Central Working Plans Officer. When that officer is sanctioned, it is proposed to combine in him the control of Working Plans and Research.

Hill-tribes.

21. Satisfactory progress was made in enlisting the co-operation of the Khonds in *Ganjām*, the Chentsus in *Kurnool* and the Malayalis in the Javadi hills of *North Arcot* in the protection of forest areas. Similar attempts are being made with the Koyas and Reddis in *Gōdāvari*.

Order—No. 274, Revenue, dated 1st February 1915.

Forest No. 7.

With the proceedings read above the Board submits the prescribed reports on forest administration for the year ending 30th June 1914 together with summaries of the progress made in this department of the public service during the quinquennium closing with that year. The circumstances of each of the four forest circles are dealt with separately in the body of these papers and the administration of the Presidency as a whole is reviewed and summarized in the covering resolution of the Board. This arrangement involves much re-duplication of matter and the volume of the reports is further swollen by a mass of detailed statistics the practical value of much of which is open to question. The Government have now under consideration the feasibility of consolidating the separate circle reports and curtailing the length of the statistical appendices.

2. The Board's summary of the events of the past quinquennium furnishes a record of progress in various important directions. The period under review has witnessed the creation of an additional circle and the formation of two new district charges, while the overworked controlling staff has received some relief by the systematic replacement of departmental agencies for the exploitation of forests by the employment of contractors, a change which has been accompanied by a substantial growth in the financial return. Towards the close of the quinquennium a great advance towards the formulation of future policy was made as a result of the appointment of a special Forest Committee and a visit of inspection by Mr. Beadon-Bryant, the Inspector-General of Forests. The most important result of the deliberations of the former body is the classification, now in progress, of forest areas according as they require scientific control or admit of management by local committees. When the transfer of areas coming under the latter class to village panchayats has been completed, it is hoped that the new system will go far to remove or reduce the friction between forest subordinates and the public which has been such an unsatisfactory feature of past administration. The recommendations of the Inspector-General were specially directed to the need for further re-organization of the departmental staff and the systematization of expenditure on communications and buildings; certain additions to the staff had already been sanctioned, but Mr. Beadon-Bryant's note laid stress on the necessity for substantial further expenditure on this account and proposals to that end are now under the consideration of Government. Other features of the quinquennium, of which mention may be made are a noticeable curtailment in the amount of artificial demarcation due to the re-alignment of irregular boundaries, improved arrangements for the conduct of forest surveys, the preparation of further working-plans though the progress made in this direction was regrettably inadequate owing to the inadequacy of the staff, the large outlay on communications and buildings, the marked and unsatisfactory increase in the amount of forest crime which, it is hoped, will admit of substantial reduction with the re-classification of forest areas, the introduction of forest panchayats and contemplated improvements in the staff and the methods of working, the extension of systematic fire protection to a much larger area of forest, the action taken to regulate grazing notably by the prohibition of goat-browsing, an advance in the average annual yield and gross forest revenue accompanied by a striking increase in the annual surplus during the closing years of the quinquennium when the full effect of the change from departmental to contract working began to make itself felt, the establishment of a Forest College for the training of rangers and of circle vernacular schools for that of foresters and forest guards, and the progress made in utilizing hill tribes in assisting the operations of the department.

3. The salient features of the administration during the year 1913–14 being sufficiently brought out in the Board's review, the Government will merely refer briefly to a few matters which seem to call for remarks.

(i) *Working-plans—paragraph 7 of the Board's review.*—The revised re-organization proposals referred to in this paragraph and in paragraph 38 are still under consideration. The Government are fully alive to the great need for the appointment of additional working-plans officers and much regret that it has not yet

been found possible to spare more than one officer for this purpose. Pending the outcome of the recommendations which will be made to higher authorities on the subject, however, they would invite the attention of the Board to the suggestion made in paragraph 2 of G.O. No. 439, Revenue, dated the 11th February 1914, regarding the utilization of selected Extra Assistant Conservators in connection with the preparation of working-plans.

(ii) *Communications and buildings—paragraph 8 of the Board's review.*—The Government await the promised report regarding Mr. Beadon-Bryant's recommendation to draw up a definite scheme of road and building work.

(iii) *Forest offences—paragraphs 10 to 15 of the Board's review.*—The Board's reply to Government Memorandum No. 2305-E/14-1, dated the 15th October 1914, has since been received and is now under consideration. The Government recognize that the amount of forest crime depends, as the Board points out, upon the density of the local population and the proximity of the forests and they share the Board's hope that the policy of withdrawal of control over small and scattered areas will materially reduce the regrettably large amount of forest crime. They consider however that where the number of offences reported is so high as, for instance, in South Arcot there is a *primâ facie* case for a careful local enquiry with a view to ascertain whether further remedial measures are not possible to enforce the general instructions already issued by the Board.

In paragraph 12 the percentages of cases undetected and cases taken to court during the year under review, which should be 6·01 and 19·70, have by mistake been transposed.

(iv) *Protection from fire—paragraph 16 of the Board's review.*—The Government presume that action is being taken, wherever possible, to extend the system of fire-line clearances through the agency of purchasers of the felled trees, which is stated to have been attended with such satisfactory results in South Kurnool.

(v) *Minor forest produce—paragraph 30 of the Board's review.*—There must surely be some mistake in regard to the figures relating to the Central Circle, where the decrease in the value of the minor produce expected is ascribed chiefly to a fall in the revenue of one district—Nellore; for, according to the details given in the tabular statement in paragraph 28, the decrease under removals by purchasers amounted to nearly $3\frac{1}{2}$ lakhs, whereas in paragraph 33 reference is made to a substantial increase in the revenue derived in that circle under grass and other minor produce.

(vi) *Administration—paragraphs 36 to 39 of the Board's review.*—The recommendations of the Board of Visitors of the Forest College have been dealt with in G.O. No. 3067, dated the 26th October 1914.

With a view to expedite the development of the panchayat system the Government are now examining a proposal to appoint a special officer of the rank of Sub-Collector, whose duty it will be to visit each district in order to advise and assist the local officers in this important matter.

The Government notice with satisfaction the terms in which the Board refers to the work done by Conservators and the officers under their control. They desire in particular to endorse the Board's appreciation of the services rendered by Mr. Lodge.

(vii) *Forest College—paragraph 40 of the Board's review.*—A detailed account of the working of the Forest College is given in the concluding portion of the report. The Government observe with pleasure the energy with which the officers of the College have worked and the satisfactory progress made during the year.

4. There are also a few matters suggesting comment in the reports of Conservators:—

(*a*) NORTHERN CIRCLE.

Paragraphs 53 (iii) and 61 of the report at pages 21 and 25, respectively.—The revision of the Gōdāvari drift-wood rules is now engaging the attention of Government.

(*b*) CENTRAL CIRCLE.

Paragraph 11 of the quinquennial summary at page 31.—The area finally settled at the end of 1908-09 appears from a scrutiny of the totals for other circles to have been 5,820 and not 5,264 square miles.

Paragraph 22 *of the quinquennial summary at page* 33.—The increased expenditure and decreased surplus in the quinquennium ending 1913–14 is ascribed mainly to large expenditure incurred in Bellary and Anantapur under certain heads. On the other hand in paragraph 15 of the Northern Circle report at page 7 the transfer of the same two districts is cited as accounting for a decrease in the revenue and surplus of that circle. The discrepancy between these statements requires explanation.

Paragraph 20 *of the report at page* 39.—It is presumed that full investigation has been made of the circumstances attending the cultural operations in Chingleput the reports relating to which have given rise to suspicion.

Paragraphs 34 *and* 35 *of the report at pages* 42 *and* 43.—The statement in paragraph 34 shows a fall of Rs. 2,49,349 in the outturn of minor produce, whereas paragraph 35 indicates an increase of Rs. 77,239 under the same head. These discrepancies which have already been alluded to in paragraph 3 (v) *supra*, should be fully explained.

(*c*) Southern Circle.

Paragraph 62 *of the report at page* 67.—The Board is requested to state whether effect has been given to the Conservator's advice altogether to prohibit *punakad* cultivation.

(*d*) Western Circle.

Paragraph 38 *of the report at page* 84.—A brief report should be submitted regarding the circumstances in which the Badagas in the Nilgiris have been deprived of the permission to remove firewood free for purposes of cremation.

5. The Government observe with regret that Conservators generally speak in very unfavourable terms of the conduct of the subordinate forest staff. This unsatisfactory state of affairs is largely due to the want of adequate controlling staff, to the underpayment of certain classes of subordinates and to the number of temporary hands employed, defects which will be lessened, if not removed, when financial considerations make it possible to give effect to the proposals for the re-organization of the department which are now engaging the consideration of Government.

(True Extract.)

L. Davidson,
Secretary to Government.

To the Board of Revenue, Land Revenue (Forests).
,, Accountant-General.
,, Government of India, Department of Revenue and Agriculture (with C.L.).
,, Inspector-General of Forests (with C.L.).
Editors' Table.

ANNUAL ADMINISTRATION REPORT

OF THE

FOREST DEPARTMENT

OF THE

MADRAS PRESIDENCY

FOR THE

TWELVE MONTHS ENDING 30TH JUNE 1915.

1914-1915.

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1915.

INDEX.

FOREST ADMINISTRATION REPORT,

MADRAS PRESIDENCY,

NORTHERN CIRCLE, 1914–1915.

Chapter.	Subject.	Paras.
I	Constitution of State forests—	
	1. Alteration in area	1
	2. Forest settlement	2
	3. Demarcation	3
	4. Forest surveys	4 & 5
II	Management of State forests—	
	1. Regulation of management—	
	(*a*) Preparation and control of regular working-plans ...	6 & 7
	(*b*) Annual plan of operations	8
	2. Communications and buildings—	
	(*a*) Roads and bridges	9
	(*b*) Buildings	9
	(*c*) Miscellaneous works	9
	3. Protection of forests—	
	(*a*) General protection	10 to 14
	(*b*) Protection from fire	15 to 17
	(*c*) Protection from cattle	18 & 19
	(*d*) Protection against injuries from natural causes ...	20
	4. Sylviculture—	
	(*a*) Natural reproduction	21
	(*b*) Artificial reproduction	22
	(*c*) Operations for the improvement of growing stock ...	23
	(*d*) Experiments	24
	5. Exploitation—	
	(*a*) System of management	25
	(i) Major forest produce	26 to 32
	(ii) Minor forest produce	33 to 36
	(*b*) Agency of exploitation—	
	(i) Government	37
	(ii) Purchasers	38
	(iii) and (iv) Right and privilege holders and Free-grantees	39
	(*c*) Outturn and sources of forest produce	40
III	Financial results	41
IV	Administration	42 to 51
V	General	52 to 64
	Appendices A, B and Forms Nos. 65 to 67 and 69 to 85.	

OFFICE OF THE CONSERVATOR OF FORESTS,
NORTHERN CIRCLE,
WALTAIR, 11*th September* 1915.

R.C. No. 1664 of 1915.

From

A. W. LUSHINGTON, ESQ., C.I.E.,
CONSERVATOR OF FORESTS,
Northern Circle,

To

THE SECRETARY TO THE COMMISSIONERS OF
LAND REVENUE AND FORESTS,
Madras.

SIR,

I have the honour to submit herewith my report on the Forest Administration of the Northern Circle for the year 1914–15.

I have the honour to be,
Sir,
Your most obedient servant,
A. W. LUSHINGTON,
Conservator of Forests, Northern Circle.

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FOREST ADMINISTRATION REPORT OF THE NORTHERN CIRCLE

FOR THE

FOREST YEAR ENDING 30TH JUNE 1915.

CHAPTER I.—CONSTITUTION OF STATE FORESTS.

1. Alteration in Area.

The following statement shows the abstract of changes in forest areas :—

Class.	Area on 1st July 1914.	Added during the year.	Excluded during the year.	Net increase or decrease.	Area on 30th June 1915.
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
Reserved forests	4,614	13	11	+ 2	4,616
Reserved lands	507	1	8	— 7	500
Leased forests	2	..	..	..	2
Total ..	+ 5,123	14	19	— 5	5,118

Eight square miles in *Vizagapatam* were finally constituted reserved forests and 5 square miles added in *Kistna* by rectification of boundaries ; while again 11 square miles were disafforested in the latter district. One square mile in *Vizagapatam* was made reserved land. The other changes are of minor importance.

2. Forest Settlement.

2. Fifteen blocks (507 square miles) remained to be settled at the commencement of the year, to which two (·60 square mile) were added during the year ; of these, three blocks (8·19 square miles) were transferred to reserved forests leaving 14 blocks (498·98 square miles) pending at the end of the year. Of these 14, two were with the Board, one returned for correction, two with the Collector, one pending decision of an appeal before the Privy Council and settlement was proceeding in respect of 8 blocks (352·15 square miles) in *Upper Gōdāvari*.

3. Demarcation.

3. One hundred and seven miles of external demarcation was carried out in *Ganjām* at a cost of Rs. 2,450 and 3,865 miles were repaired at a cost of Rs. 3,275 and 1,297 miles were recleared by the Forest subordinates free of cost. The average cost per mile of fresh demarcation was Rs. 22–14–4 and repair Re. 0–13–7 against Rs. 22–7–7 and Rs. 7–13–4 in the previous year.

4. Forest Surveys.

(*a*) *By Survey of India.*

4. No new work was undertaken during the year. The index maps of the three divisions of *Kurnool* are still under different stages of preparation.

(*b*) *By Departmental Survey.*

5. During the year Rs. 10,560 were spent on Forest Surveys and maps for 502 square miles of reserved forests are yet to be done —124 square miles in *Kistna*, 3 in *Kurnool East*, 95 in *Kurnool South* and 280 in *Kurnool West*. The departmental work that was carried out during the year consisted chiefly of the verification of boundaries, alignment of roads and fire lines and preparation of coupe and working

plan and other maps. Out of seventeen selected blocks, 10 blocks comprising an area of 120 square miles in the Rampa territory (including Guditeru and Datsarty muttahs) in *Gōdāvari Lower* were surveyed but maps were not prepared.

Dupati survey.—The ten appeals pending at the end of previous year were disposed of during the year.

CHAPTER II.—MANAGEMENT OF STATE FORESTS.

1. Regulation of Management.

(*a*) *Preparation and Control of Regular Working Plans.*

6. *Preparation.*—In most of the districts Working Plans are still being delayed by the preliminary classification of reserves under the Forest Committee's report. But in *Ganjām* a tentative Working Plan for the Mohiri hills of Berhampur range has been sanctioned. In *Gōdāvari Lower* the preliminary Working Plans prepared for the Gokavaram and Peddapur ranges were returned for revision with reference to the said classification and in *Kurnool West* an additional provision in the Working Plan for the pollarding of Yepi trees (*Hardwickia binata*) in the grazing areas of the Yerramalais for rope fibre is awaiting the sanction of the Board. The Working Plans for other districts are under different stages of preparation as also one for the Alamore palmyra tope in *Kurnool West*.

7. *Control.*—The prescriptions of the Working Plans were generally adhered to except in the following cases. In *Ganjām* the accumulated balances of forest unworked in previous years were partly worked during the year and four bamboo coupes and 5 fuel coupes which were not provided for in the Working Plan were worked out to meet local demand. In *Kistna* the construction of the walls round the reserves in Bezwada taluk and round those in Ellore range was put a stop to and prickly-pear fencing was made instead. In *Kurnool West* cultural operations in the Yerramalais were abandoned, and the working of timber coupes in Atmakur, Velgode and Nandyal ranges was continued under coppice with standard system until September 1914 when work in the coupes was stopped.

(*b*) *Annual Plan of Operations.*

8. The sanctioned plans were generally followed, except as detailed under Working Plans above and in the following cases. In *Ganjām* Ramagodo and Thinikondia coupes were leased to contractors, fencing of one compound completed and another begun and a well was sunk in the Extra Assistant Conservator's bungalow at Russellkonda. Construction of a fourth bridge over Odangi Nalla was not started and two bridle-paths abandoned in Pondakhol range. In *Vizagapatam* a bamboo coupe was worked departmentally for want of a contractor, in *Gōdāvari Upper* a well was postponed, in *Kistna* certain minor works in the three ranges were given up and in *Kurnool West* fencing the compound at Pecheruvu was carried out while the gang sheds in the Dhone range were abandoned. In *Gōdāvari Lower* and *Kurnool South* certain buildings and roads were given up, preference being given to those of a more urgent nature.

2. Communications and Buildings.

9. The following figures compare the outlay on communications and buildings :—

	1913–14.	1914–15.
	Rs.	Rs.
Roads and bridges	31,588	32,333
Buildings	43,789	31,216
Other works	8,869	3,096

The increase under roads is due to the construction of five new roads in *Gōdāvari Upper* (Koya work), one earthern road made in *Gōdāvari Lower* and largely to the contribution of Rs. 5,000 to the Local Fund Department towards the maintenance of the two Nallamalais ghat roads from each of the *Kurnool East* and *Kurnool South* districts.

(*a*) *Roads and Bridges.*

The important works of a permanent nature executed during the year were the following :—

Ganjām.—Four miles of new roads and the Tarsingi-Jadadhara road were completed, 51 miles of existing roads repaired and a third bridge over Odangi Nalla was partly constructed.

Gōdāvari Upper.—Five new roads were in progress.

Gōdāvari Lower.—More than two miles of an earthern road from Sarabhavaram to Boyapadu was completed and 82 miles of existing roads were repaired.

Kistna.—The Nallacherla-Kodegudem road was completed and Errakuruva hill road was partly constructed.

Kurnool East.—Nine miles of bridle-path were converted into cart-track. Three bridle-paths over a length of 11 miles and 5 miles of foot-path constructed and 30 miles of foot-path were converted into bridle-path.

Kurnool South.—Four miles of bridle-path was made and about 58 miles of existing roads were improved and repaired. A sum of Rs. 5,000 was contributed to the Local Board from each of the *Kurnool East* and *Kurnool South* divisions for the maintenance of the Mantralakanama and Nandikanama ghat roads respectively.

Kurnool West.—Two cart-tracks of $\frac{1}{4}$ and $1\frac{1}{2}$ miles long in Gundlabrahmeswaram range were constructed and a cutting in the Adutla road was made to reduce the gradient.

(*b*) *Buildings.*

The important works of a permanent nature carried out during the year were the following: rest-house at Chahali in *Ganjām* and at Sudikonda in *Gōdāvari Lower* completed and inspection sheds at Tummalabailu and Chintala in *Kurnool East* nearly completed. Range quarters at Jangareddigudem in *Gōdāvari Lower* in progress and the range quarters at Eguvacherlopalli in *Kurnool East* completed, subordinates' quarters at Urrinka and Jangareddigudem in *Gōdāvari Lower*, at Chinnamantrala in *Kurnool East*, at Malakondapenta and Mahanandi in *Kurnool South* were completed. Range inspection shed at Nekkanti in *Kurnool East* and Kutcha quarters for a Deputy Ranger at Isukagundam in *Kurnool South* and sheds for subordinates in *Kurnool West* were also constructed, and additions such as out-houses kitchens, stables, etc., to existing buildings, and sheds to house forest guards and forest watchers, etc.

(*c*) *Miscellaneous Works.*

The chief works done were the construction and repair of tanks, wells and springs and digging and widening channels. Bunds were also erected across streams and streamlets in the Gundlabrahmeswaram range in *Kurnool West.*

3. Protection of Forests.

(*a*) *General Protection.*

10. The following statement shows the number and classification of forest offences brought to light during the year :—

Cases.	Injury to forests by fire.		Unauthorised felling or appropriation of wood and minor forest produce.		Grazing without permission or in forests in which grazing is prohibited.		Other offences.		Total.	
	1913–14.	1914–15.	1913–14.	1914–15.	1913–14.	1914–15.	1913–14.	1914–15.	1913–14.	1914–15.
Cases taken into court ..	9	8	485	462	174	194	54	63	722	727
Cases compounded ..	5	5	2,111	1,812	742	706	134	132	2,992	2,655
Cases undetected . ..	220	289	179	183	5	34	5	3	409	509
Total ..	234	302	2,775	2,457	921	934	193	198	4,123	3,891

The number of cases reported was less than in the previous year and decrease was under unauthorised fellings though counterbalanced by slight increase under all other heads. The decrease in *Kistna* is due to better supervision by the introduction of the gang system of patrolling and in *Kurnool South* to the imposition of deterrent composition fees in the cases of professional thefts of timber especially in the Sirvel

taluk which would seem to have had its effect in the reduction in the number of offences and also partly due to selling of lines and coupes, to severe notice taken in court of such offence and to the effect of more sufficient patrol by gangs. The increase under injury to forests by fire mostly in *Kurnool West* is due to the inclusion of the large number of fires occurred in areas under special and general protection which were omitted in previous years as their causes were unknown.

11. There were 674 cases pending at the beginning and 556 at the end of the year; of these latter 129 were with the Magistrates. Out of the cases brought to trial during the year, 758 ended in conviction, 88 in acquittal against 722 and 76, respectively, in the previous year; the percentage of failure being 10·40 against 9·52 in the previous year.

Closure of forests to grazing for not reporting or preventing illicit grazing or other offences on a large scale.

12. Nowhere was the necessity found to close the forests on this account, but the privilege of free grazing of 200 head of cattle was suspended for one year to take effect from 1st July 1915 in *Vizagapatam* owing to the indifference of Kondasantha villagers to render timely help in putting out fires that broke in the vicinity of the village. Statistics of offences near villages were taken with a view to enforcing closure next year to the worst offending villages in *Kurnool West.*

13. Two thousand three hundred and thirty cases were compounded for Rs. 24,310 against Rs. 23,971 collected in the previous year on 2,494 cases compounded. Though the number of cases compounded were less than in the previous year, the amount of compounding fees collected was greater due to levy of deterrent fees in grave cases in *Vizagapatam* and in the cases of professional thefts already referred to in *Kurnool South.*

14. No rewards were granted except in *Gōdāvari Lower* where a sum of Rs. 8 was paid to certain Hill Reddis for rendering assistance in the detection of a timber theft. In *Ganjām* rewards in the shape of rice valued at Rs. 165 were granted to Pondakhol Khonds for protecting the forests and ten pairs of bulls at a cost of Rs. 364 were also granted to enable them to cultivate the lands in the valleys and thereby to compensate them for having given up *podu* cultivation. About Rs. 7,000 were distributed by the District Forest Officer or his Assistant as rewards to Koyas, etc., in *Upper Gōdāvari* for having protected the forests from fire. Rs. 1,162 were paid under Board's sanction to the Chentsus of Gudem Range in the shape of clothes, etc., for successful fire protection in *Kurnool East.*

(*b*) *Protection from Fire.*

15. The areas attempted and protected are given in Form No. 72. The system of fire protection was the same as usual and the clearing of fire lines by purchasers themselves of the materials thereon was followed in *Kurnool South* and *Kurnool West*, but in the latter district this was not found very suitable as the localities were in most cases away from rail and road communication. In *Ganjām* the Khonds, allowed the usual concessions, assisted in extinguishing fires, fire patrols being employed only where they were not available. The fire season this year was an exceptionally difficult one as there were no rains at all till the middle of May 1915 which was most unusual. The result was not so bad, however, but most of the fires that occurred were due to carelessness on the part of Khonds and others who travel through the forests at night carrying torches, leaving glowing ashes here and there though intentional incendiarism was not anywhere noticed. Protection of sal massif coupes and of areas protected by 60 feet wide fire line was fairly successful. In *Vizagapatam* the protection of Dharakonda reserve was a success but not so in the case of Sinivaram reserve owing to the slackness of the subordinates in fire tracing the lines early in the season and to the indifference in rendering help by Kondasantha villagers already referred to. In *Gōdāvari Upper* steps were taken to reward the Koyas and Reddis by results and the system promises to be a great success and it is hoped to enhance rewards where complete protection has been ensured. Several fire lines were widened and the reserves in the Bhadrāchalam taluk were especially immune from fire due to the readiness with which the hill tribes assisted and also to the favourable season, there being rain at frequent intervals during February to May. On the contrary in Nugur taluk although the hill tribes were just as keen in getting

their lines cleared, the rain held off most unfortunately and the forests consequently were very dry during the whole season, the result being that a very large area was burnt over. This result is also ascribed to the ineffectual fire lines and also to the extensive boundary along the Bastar State being practically useless as a fire line, as it can be widened only after the Bastar boundary is settled. In *Gōdāvari Lower* the services of the hillmen were more frequently utilized in fire protection and payments by results were made. Ninety-nine per cent. of the area escaped fire, good rains in April and May being mainly responsible for this satisfactory results. In *Kistna* out of 60,229 acres attempted, 60,196 acres were protected the success being ascribed to early rains. In *Kurnool East* the area successfully protected was 136,091 acres out of 151,235 acres attempted the number of fires being 22. The worst fire of the year was the one which is said to have entered the Gudem Range from the *West* district at four places which could not be controlled for nearly four days, although the Chentsus of the two gudems of Chinnamantrala and Maddipenta tried to extinguish it. Fire protection was introduced for the first time during the year in Markapur and Cumbum Ranges with satisfactory results. The Chentsus, on the whole, behaved very well during the fire season especially those of Telugurayanicheruvugudem a large portion of which was burnt in the previous year. In *Kurnool South* owing to heavy rains and rain continuing till November and Decem'er the fire tracing was continued till 14th February. The lines in Chelama and Gundlakamma Ranges were kept clear of growth throughout the year by the employment of fire patrols. Four hundred square miles were successfully protected out of 522 attempted and the large burnt area is due to the large number of fires occurred in Giddalore and Sirvel Ranges. The chief works of the year besides the usual fire protection operations in *Kurnool West* were the widening of Sim's line to 100 feet and the fire tracing of the central Nallamalais road to a width of 60 feet. Practically the whole of the Nandyal Range was burnt by the fires which occurred late in the year. Most of the fires appear to have been started by Chentsus but two in Gundlabrahmeswaram Range were started by timber dragging Woddars. One Chentsu was actually seen by the Special officer for Chentsus with a torch setting fire to the forest, but could not be caught or identified.

16. Rupees 65,273 were spent on fire protection during the year. The area dealt with was more or less the same as in the previous year, *i.e.*, 4,447 square miles, of these 4,094 square miles were successfully protected against 3,898 square miles during the previous year; the proportion of failure fell to 7·94 from 12·97 in the previous year, the cost per square mile successfully protected rose to Rs. 15–15–1 from Rs. 13–15–9 in the previous year. The increase in cost is due to widening up of the Pondakhol boundary in *Ganjām* and Sim's line in *Kurnool West* and to the large amount of rewards made to Koyas and Reddis in *Gōdāvari Upper*.

17. Appendix A shows the number and origin of fires.

There was a slight fall in the total number of fires with appreciably less damage than in the previous year, the number of fires under causes unknown showing a small increase with a less area burnt.

(*c*) *Protection from Cattle.*

18. Out of 5,118 square miles 1,163 were closed to all animals throughout the year against 952 in the previous year, *Kurnool South* and *Gōdāvari Lower* contributing mostly to the increase. Goats were completely excluded from the forests.

19. Appendix B shows the number of cattle impounded during the year compared with the average of the three years preceding. The average shows a marked decrease in *Kurnool East* and *Kurnool South* though there was a slight increase in *Kurnool West*. But the past years figures show a rise over the averages mostly in the first two districts and in *Kistna*; the increase in *Kurnool South* was due to the closure of forests beyond Sim's line for sylvicultural reasons and in *Kistna* to the large number of cattle driven during floods into the closed areas of reserves.

(*d*) *Protection against injuries from natural causes.*

20. The attack of Jacide on teak leaves remained local in Nugur Range in *Upper Gōdāvari* and the casuarina trees attacked by root fungus in *Gōdāvari Lower* in the Kandikuppa plantation were at once removed and sold.

4. Sylviculture. *

(*a*) *Natural Reproduction.*

21. Reproduction of predominant species, such as Sal and Sahajo, etc., in *Ganjām* continued to be satisfactory in specially protected areas and was less noticeable elsewhere; of all the important species, such as teak, etc., good in *Gōdāvari Upper* and fairly satisfactory in *Gōdāvari Lower* where Teak, Kondathangedu, Yegisi and Nallamaddi seeded well; in *Vizagapatam* of Nallamaddi and Kondathangedu in Dharakonda and Sinivaram reserves Billu in Sarugudu and Kondathangedu in Karaka reserves abundant; in *Kistna* good in Bezwada Range and unburnt closed areas of Ellore Range; in *Kurnool East* in closed areas and in the freed areas of Gudem Range from bamboo weeds and shrubs, of Billu, some Yegi Tumki and Teak satisfactory; in *Kurnool South* of Yepi in both Nallamalais and Yerramalais good and Billu and teak bore seed; in *Kurnool West* of Yepi in Yerramalais good, excellent in protected forests of Gundlabrahmeswaram Range where Jittegi seeded profusely, but in the Terai and the pentas natural reproduction was generally deficient owing to fires and to trampling and to browzing by cattle. Reproduction from coppice shoots excellent in *Vizagapatam*, in Bezwada and Ellore Ranges of *Kistna* and in *Kurnool West*. Reproduction from root suckers were noticeable in *Gōdāvari Lower*, *Kurnool South* and *Kurnool West*. The reproduction of mangrove forests in *Gōdāvari Lower* and *Kistna* was, on the whole, fair. In *Kurnool West* in Pecheruvu Range hacked sandal trees reproduced themselves by root suckers. In *Gōdāvari Lower* the reproduction of bamboo was abundant.

(*b*) *Artificial Reproduction.*

22. Form 75 shows the areas under plantation and topes or subject to cultural operations.

Regular plantation.—In *Gōdāvari Lower* and *Kistna* no planting work was done in the casuarina plantations as the reserves are shortly to be abandoned, but the previous year's plants were maintained. In *Kurnool East* no new plantations were started but in the existing five plantations of the Gudem Range casualties were filled up for which purpose small nurseries were maintained near each plantation which were looked after by Chentsu females and boys. In *Kurnool West* the teak plantations at Pecheruvu, Nagaluti, Bairluti, Pasurutla, Rudracode, Sudam, Pangidi and Honkaram were maintained, but extension of the plantations at Honkarm, Bairluti and Pecheruvu was stopped and 20 to 40 acres were planted with pure teak in each of the other five where the growth of teak is generally good and marked near streams and irrigation channels which indicates the necessity for regular and abundant watering during the year of planting. It is observed that the plantations are dependent upon the limited water-supply and cannot therefore be indefinitely extended. The method of liberation of the growing teak from the soft wooded species in these older areas has yet to be decided. At Pecheruvu it was found that sowing sandal in mounds and trenches is wrong as the hosts ought to be mature before the sandal is sown and the cost is out of all proportion to the results achieved. Work was therefore stopped at the end of the year and simple dibbling of sandal seeds round mature hosts combined with much more substantial fencing was substituted. Sandal seedlings are greedily devoured by deer and cattle in the hot weather and really efficient protection against both in the early stages is therefore necessary.

Cultural operations.—*Gōdāvari Upper*, most of the plants in the old plantations of Lakkavaram Range died and in the Marrigudem Range there were casualties of about 2 per cent. among the plants found surviving at the beginning of the year. *Kistna*, Sissoo, Red sanders and teak plants planted in Bendamcherla reserve proved a failure and very poor result attended the sowing of Yegi and teak seeds in the felled areas of Kondapalli and Kondur reserves Babul seed was sown in fenced areas in two different blocks in the Bandar Range and the plants were thriving well. An area of 100 acres in each of the Upputeru and Kanur reserves was sown broadcast with Mada and Thanduga seeds and the plants were doing well in the former, those in the latter withered in the summer.

* List of trees with their scientific names will be found in Appendix C.

(c) Operations for the improvement of growing stock.

23. Improvement felling thinning, coppicing, clear felling, cleaning and weeding and removing dead wood for the improvement of growing stock are detailed under exploitation.

Creeper cutting—was as usual carried by the subordinates in *Ganjām*, *Gōdāvari Lower* and partly in *Gōdāvari Upper* and creepers and thorny bushes were systematically removed in all the coupes prior to felling by contractors in *Kistna* and in *Kurnool West* creeper cutting in coupe 6 of Gundlabrahmeswaram Working Circle was done. In *Gōdāvari Lower* 219 acres were fenced, in *Kistna* four closed reserves were fenced with prickly pear on mounds, in *Kurnool East* bamboos and weeds were thinned out to help the natural growth of important seedlings and over an area of 4 acres in the Badvel reserve extension prickly pear was cut back by the patrolling gang to free the palmyra seedlings, and in *Kurnool West* bunding the head waters of the Gundlakamma river was carried out and more than 5 miles of line were stone walled in the Yerramalais.

(d) Experiments.

(i) On Species.

24. *Sandal—Ganjām.*—The sandal seedlings planted in Kontaipalli, Gundribadi and Kullada reserves were more or less a failure. *Vizagapatam*—32 plants were counted in the compound at Natavatam of which two were root suckers and two appeared to have come up naturally from seeds of other sandal trees, 162 seedlings were transplanted along the streams in the Dharakonda reserve and 15 plants in the Golgonda Range office compound are thriving well. Of the plants put down in the previous year in the compounds at Narasapatam, Sinivaram, Tadaparti and Kristnadevipeta a few only are surviving. No fresh plants were raised in the compound of the Conservator's office, Waltair, and the previous year's plants are mostly doing well; *Gōdāvari Lower*—the experiments with sandal were continued in many of the reserves of the Peddapur, Gokavaram and Rajahmundry Ranges, but was almost a complete failure; out of the seedlings obtained by sowings in the previous year 130 are surviving in the Dewancheruvu, Mallavaram and Tirumalayapalem reserves and in the Collector's office compound at Cocanada and these are in a very healthy condition. *Kistna*—the sandal plants already planted in different areas of the coupes in Kondapalli reserve of Bezwada Range are thriving well. *Kurnool East*—sandal seeds were sown by Gang subordinates in Chinaganapalli and by fire patrols in selected localities of Markapur and Morricheruvu ranges but the results were not at all encouraging. *Kurnool South*—seedlings were planted in all the ranges but without success.

Mahogany.—Nine mahogany trees in the Natavaram bungalow compound in *Vizagapatam*, are doing well.

Red Sanders, Ganjām.—Red sanders in Napier's Park continue to grow, *Vizagapatam*, out of the 135 plants which survived last year only 35 are now reported to be doing well. *Kurnool East* and *South*—experiments are tried as in the case of sandal with the same result except in Giddalore Range in the latter district where the seedlings were reported to be in good condition.

Log Wood.—The log wood plants in the Kandikuppa plantation in *Gōdāvari Lower* obtained from the sowings made in 1903 are reported to be unhealthy and the trees in the Conservator's compound at Waltair are doing well.

Divi Divi.—Trees in Edugurallapalli, Singaram and Tunikicheruvu bungalow compound in *Gōdāvari Upper* are doing well.

Rubber—(1) *Para*: *Vizagapatam.*—The few rubber plants in the compound of the rest-house at Sinivaram are thriving well and out of 41 rubber plants surviving at Pandirimamidi at the close of the previous year 8 died, leaving 33 at the close of the year.

(2) *Ceara.*—The condition of ceara rubber trees at Osurabonda in *Ganjām* continue to be satisfactory.

Edible date, Gōdāvari Upper.—The oldest in the Murmur bungalow compound is thriving well. The two date trees in front of Kunavaram rest-house are doing well.

Loquat, *Apple*, *Litchi* and *Mango* plants in *Vizagapatam* are thriving well.

Eucalyptus.—Three plants in the Golgonda Range office compound in *Vizagapatam* are thriving well.

Pinus longifolia.—Out of 470 seedlings surviving in the Sinivaram rest-house compound in *Vizagapatam* at the beginning of the year 56 died, leaving 414 at the close of the year.

(ii) Other Points.

(*a*) *Lac inoculation*, *Kurnool West*.—The trees of *Butea frondosa*, *Zizyphus Jujuba* and *Schleichera trijuga* were inoculated in Bairluti, Pecheruvu, Pangidi and Gundlabrahmeswaram Ranges and the stick lac for this purpose was obtained from Dhamtari in the Jaipur division in the Central Provinces.

Mulberry.—Cultivation was started at Bairluti and Pecheruvu in *Kurnool West*.

These two above experiments were undertaken principally with the object of providing permanent work for the Chentsus in the shape of lac and silk cultivation.

(*b*) *Test of annual increment*.—In *Gōdāvari Lower* with a view to determine the quantity of annual growth five sample plots, 1 acre each, were taken in the portion worked out in the Marlagudem reserve, Polavaram Range, and they were clear felled and the results recorded.

5. Exploitation.

(*a*) *System of Management.*

25. The total area for which regular working plans were sanctioned was 2,094 square miles and the area dealt with under different sylvicultural systems are detailed below:—

Sylvicultural system.	Area in sq. mls.	Per cent.
(1) Clear felling	148	7·10
(2) Selection felling	438	21·10
(3) Simple coppice felling	35	1·70
(4) Coppice with standard felling	285	13·70
(5) Improvement felling (mostly selection)	107*	5·20
(6) Unworked areas	1,081	51·20
Total ...	2,094	100

(i) Major Forest Produce.

(1) *Clear or Regeneration Fellings.*

26. Thirty-eight acres in the Kandikuppa plantation were clear felled with a view to disafforestation in *Gōdāvari Lower*, two coupes in Bezwada, two in Ellore and four in Bandar ranges in *Kistna* and the areas to be planted in the regular plantations in *Kurnool West* were treated under this system.

(2) *Selection Fellings.*

27. Twenty sal trees over 7½ feet in girth were felled in *Ganjām* and 1,845 dead and dying sal trees were selected in the same district and felled. The indent system for the disposal of the most valuable species in unreserves in the same district has been in force for seven years and the demand for the timber under this system is increasing by leaps and bounds. The windfallen sal timber from Donibai and Somaralle reserves in *Vizagapatam* was brought down to depôts and sold. Thirty-three acres in three reserves of Bandar range in *Kistna* were treated under this system. A palmyra coupe of 150 matured trees in the Badvi reserve in *Kurnool East* was leased out to contractor during the year and the trees to be felled were selected by the Range officer and marked previously. In *Kurnool South* in Owk palmyra extension selected dead and dying trees were marked and removed under the provisions of the working plan. In *Kurnool West* selection working in improvement fellings was carried out in the Gundlabrahmeswaram working circle and dead timber from the hill forests was removed under this system.

(3) *Regular Thinnings.*

28. One compartment in *Gōdāvari Lower* was thinned and in *Kurnool East* and *Kurnool West* bamboos in the blocks leased out to contractors were removed under this system, but the operation in the former district had to be given up being very expensive.

* Coppice with standard also was worked on 44 square miles.

(4) *Improvement Fellings.*

29. In *Ganjām* five bamboo coupes in Gumsoor and two in Berhampore were treated, the cleaning of stumps being done simultaneously with the extraction leaving four to eight culms per clump. In *Gōdāvari Lower*, besides 38 acres of compartment XI of Kandikuppa plantation which were cleaned, operations were conducted in five reserves where dead wood and bamboos were leased out to contractors with a view to improving the growing stock. The right to fell and remove bamboos from compartments XV to XVII and coupe II of series I and II of Kondur in *Kistna* were leased out to contractors. In *Kurnool East* only dead trees and tamarind trees past the age of bearing fruits in a coupe were sold to a contractor and the Chentsus prepared agricultural implements, spokes and felloes from dead and dying yepi, yegi, and teak trees.

(5) *Coppice with Standards.*

30. Six fuel coupes in *Ganjām*, 418 acres in *Vizagapatam*, five coupes of 606 acres in the Coringa reserve in *Gōdāvari Lower* and 675 acres in Kondapalli reserve in *Kistna* were worked under this system.

(6) *Simple Coppice.*

31. *Gōdāvari Lower.*—Four fuel coupes in the Peddapur, four in the Rajahmundry (including coupes A-5 and B-5 of the Kandikuppa reserve under working plans area 584 acres) and two in the Polavaram ranges were treated under simple coppice.

(7) *Unregulated Fellings.*

32. In *Vizagapatam* permits for timber, fuel, and bamboos were issued for removal from unreserves and felling of yegisi and nallamaddi was allowed on part contract in a portion of the Bointi unreserve. Bamboos were allowed to be removed from located coupes in the Golgonda range. In *Gōdāvari Upper* the right of cutting bamboos from Marrigudem, Pulusumamidi and Lakkavaram ranges was leased out for Rs. 9,050 while removal of timber was not leased out during the year. Unregulated fellings were confined to Rampa in *Gōdāvari Lower* and to certain unreserves under the control of the Forest department and the mada fuel from the Hope Island which forms part of the Coringa extension proposed reserve was as usual removed on permits issued by the Marine department. As usual permits were granted only for palmyra trees and minor produce such as thorns, stones, manure leaves, etc.

(ii) Minor Forest Produce.

(1) *Miscellaneous Produce.*

33. In all districts seigniorage was collected on gravel, earth and other minerals. The usufruct of mango, tamarind, and other fruit trees was sold in auction; the collection of tangedu and other barks, honey, wax, myrabolams, hides, horns, etc., was leased out. The chief deviations were:—In *Ganjām* the emjoyment of the fruits in the majority of cases was left free for the Khonds and mahowa seeds were collected and sold with the balance of previous year's stock. No kamela powder was collected as there was great uncertainty as to prices and difficulty in selling it at all. In *Vizagapatam* seigniorage was collected from purchasers from hillmen at weekly markets except in Palgonda range where all the minor forest produce except the grass in Chinnamangalapuram tope which was leased out to a contractor was removed by purchasers on permits. In *Gōdāvari Lower* permits were as usual issued for all minor produce removed from Rampa as well as from the Agency division of Polavaram and Yellavaram. In *Kurnool East* and *Kurnool West* tamarind, soapnuts, myrabolams, mushti seeds, wax, horns and honey were collected departmentally through the Chentsus and were sold by auction.

(2) *Extraction of Fodder.*

34. In *Gōdāvari Lower* the right to cut and remove fodder and thatch grass in the Coringa reserve was leased out as well as fodder grass from closed areas in *Kistna*. In the three *Kurnools* removal of grass free in head-loads and on payment for cart-loads was continued, but in *Kurnool South* removal in cart-loads of grass was allowed in all the ranges for one and-a-half months except in Sirvel range because of frequent illicit removals of forest produce on a large scale.

(3) *Hay-making.*

35. No operations were undertaken except in *Kurnool South* where fodder grass was collected for feeding Government bulls in the hot weather.

(4) *Grazing.*

36. The permit system was in force in all the districts. The revenue derived was Rs. 1,20,040 against Rs. 1,24,742 in the previous year and the fall is attributable: in *Kistna* to the abolition of parcellaire system, closure of all reserves to goat browsing, closure to all animals of half the forests in Bezwada and Ellore ranges under the provisions of working plan and to some reserves having been disafforested and some placed under Panchayat management; in *Kurnool East* due to less number of cattle that resorted to the pentas of the Rachakonda range on account of water difficulty; in *Kurnool South* to the exclusion of foreign cattle and to grazing being prohibited beyond Sim's line for sylvicultural reasons.

(*b*) *Agency of Exploitation.*

(i) GOVERNMENT.

37. Forms 76 and 77 show separately the different classes of produce collected and Form 78 the stock disposed of and the balance remaining. The total quantity of timber and fuel and the value of bamboos and minor forest produce extracted departmentally were: 14·49, 6·49, and 5·05 per cent. of their respective total outturn through all agencies, and the total value of the disposals was Rs. 1,13,275 against Rs. 1,35,120 in the previous year. The fall was due to leaving the removals to a greater extent to contractors. Transport was as usual. The quantity of timber, fuel and the number of bamboos extracted was 250,028 cubic feet, 868,935 cubic feet and 351,783 against 280,305 cubic feet, 1,459,059 cubic feet and 582,151 respectively in the previous year. The fall is due to substitution of contract for departmental agency. Minor produce collected was 32,103 maunds against 89,509 in the previous year. The fall is due to no kamala powder having been collected in *Ganjām* on account of uncertainty of demand in European markets and in *Kurnool East* to total failure of soapnut crop.

(ii) PURCHASERS.

38. There has been marked increase in the removals by purchasers under all the major heads except timber due to general lack of demand. Driftwood was sold in auction in *Gōdāvari Lower* and *Gōdāvari Upper*.

(iii) & (iv) RIGHT AND PRIVILEGE HOLDERS AND FREE GRANTEES

39. The following statement shows the estimated quantity and value of produce removed under the above heads:—

Agency.	Timber.		Fuel.		Bamboos.	Minor produce.	Grazing.	Total.	Value in the previous year.
	Cubic feet.	Value.	Cubic feet.	Value.	Value.	Value.	Value.	Value.	
		Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Right and privilege holders.	184,136	4,717	582,195	5,867	552	23,570	1,079	35,785	36,965
Free grantees	86,853	3,688	..	..	671	2,820	16	7,195	3,075

(*c*) *Outturn and Sources of Forest Produce.*

Agency.	Timber in cubic feet including sandalwood.		Fuel in cubic feet.		Bamboos in value in rupees.		Minor produce (including grass and grazing) gross value in rupees.	
	1913-14.	1914-15.	1913-14.	1914-15.	1913-14.	1914-15.	1913-14.	1914-15.
Government	280,305	250,028	1,459,059	868,935	10,317	6,550	10,750	12,844
Purchasers (including confiscation).	1,813,968	1,288,226	3,877,747	4,459,851	61,539	93,180	243,438	213,695
Right holders	189,507	184,136	792,444	582,195	330	552	24,649	24,649
Free grantees	48,304	86,853	..	..	454	671	78	2,836
Total ..	2,332,084	1,809,243	6,129,250	5,910,981	72,640	1,00,953	2,78,915	2,54,024

40. The variations have been explained where necessary. The rates for grazing fees levied in the several districts are shown in Form No. 74. The number of animals licensed to grazing on permit was 866,732 against 629,218 in the previous year.

CHAPTER III.—FINANCIAL RESULTS.

41. The financial results compared with those of last year and the average of the five preceding years show a net decrease of Rs. 6,155 and increase of Rs. 1,46,252 respectively—

Items.	1914-15	1913-14.	Average of preceding five years.
	Rs.	Rs.	Rs.
Revenue	7,70,393	7,78,973	7,69,647
Expenditure "A. Conservancy and Works" inclusive of "Refunds"	3,33,624	3,73,394	5,24,383
"B. Establishments"	3,97,866	3,60,521	3,52,613
Total expenditure	7,31,490	7,33,915	8,76,996
Net results	+ 38,903	+ 45,058	— 1,07,349

The gross receipts were less than those of the previous year and more than the average by Rs. 8,580 and Rs. 746 respectively.

The expenditure under "A. Conservancy and Works" including refunds is less than that of the previous year and the average by Rs. 39,770 and Rs. 1,90,759 respectively. The net results show an increase of Rs. 38,903 which is due chiefly to the change of system from departmental to contract working.

The above figures do not show the true working of the year and the revenue is solely interest on our capital whilst the expenditure under "A. Conservancy and Works" show large amounts for capital expenditure; and a true balance sheet should merely show the interest on that capital. Working it out in this manner the following results are far more accurate:—

	Rs.	Rs.
Total revenue for the forest year ending with 30th June 1915... ...		7,70,393
Expenditure.		
A. "Conservancy and Works"	3,23,310	
Deduct all capital expenditure as per details given below:—		
A VI-c Rs. 13,939 less 10 per cent. for repairs, Rs. 1,393...	12,546	
A VII-a	32,333	
A VII-b	13,210	
A VII-c	2,132	
A VIII-a	7,426	
A VIII e Rs. 41,850 less establishment charges Rs. 3,576...	38,274	
A VIII-f	18,074	
A VIII-g Rs. 12,787 less establishment charges Rs. 4,032	8,831	
		1,32,826
Balance ...		1,90,484
Add 4 per cent. interest on "Capital" expenditure of Rs. 1,32,826.		5,313
B. "Establishment"		3,97,866
		5,93,663
Surplus ...		1,76,730

It will be seen herefrom that the true working of the year should show a surplus of Rs. 1,76,730 and not Rs. 38,976 only. The total receipts and expenditure for the year fell by 1·15 and ·41 per cent. respectively.

About 44 per cent. of the expenditure was devoted to the upkeep and improvement of the forests and 56 per cent. to exploitation, etc.

The outstanding revenue at the beginning of the year was Rs. 65,184 and the value of the sales amounted to Rs. 7,83,452. Out of the total of Rs. 8,48,636, Rs. 7,70,813 were collected leaving an outstanding balance of Rs. 77,823 at the close of the year.

RECEIPTS.

(i) *By Departmental Agency.*

Timber.—Rs. 3,287 due to want of demand for Rampa timber in *Gōdāvari Lower*; less timber found on Sim's line and excess collection in the previous year from a contractor in *Kurnool West.*

Fuel.— —Rs. 17,247 due to the inferior quality of fuel extracted in *Gōdāvari Lower.*

Bamboos.— +Rs. 4,180 due to rest having been given to certain coupes in *West.*

Minor produce.— +Rs. 2,869 due to sale of seeds in *Gōdāvari Upper* to Kallikota Estate and to the sale of previous years' stock in Gōdāvari Lower.

(ii) *By Purchasers.*

Timber.— —Rs. 22,664 due to discontinuance of timber contracts in *Gōdāvari Upper.*

Fuel.— +Rs. 46,560 due to sale of Agustinowgam plantation better prices obtained for larger number of coupes in *Ganjām*, to the larger demand by the Public Works Department, in connection with the execution of works in their charge in *Gōdāvari Upper* and to sale of Bendamurlanka plantation in *Gōdāvari Lower.*

Bamboos.+Rs. 20,792 due to better prices obtained in *Ganjām and Gōdāvari Upper* and to larger removals and increased seigniorage rates on bamboos from Rampa in *Gōdāvari Lower*

Grazing fodder grass.— —Rs. 4,70 due to the discontinuance of the issue of permits to Rankuhanumanthapuram reserve as it was under contemplation to disafforest it.

Other produce.— —Rs. 23,434 due to poor harvest in *Gōdāvari Lower*, abolition of commutation fees in *Gōdāvari Upper*, to advance collection in 1913-14 the tangedu bark lease amount of 1914-15 in *Kurnool West* and to the adjustment of Rs. 8,033 under II-(f) in March 1915, final account sent by the Accountant-General.

(iii) *Miscellaneous (including confiscated drift and waifwood).*

Revenue.— —Rs. 3,297 due to the abolition of the leasing system of driftwood groups in *Gōdāvari Lower.*

EXPENDITURE.

A. Conservancy and Works.

The total expenditure was less than that of the previous year by Rs. 41,756 and was chiefly due to leasing of more coupes to contractors, curtailing of expenditure on capital works and to abandonment of cultural operations.

B. Establishment.

The increase of Rs. 37,345 was due to earning by Imperial and Provincial officers increments under the time-scale pay, to the debit of the cost of special establishment for selection of blocks in Rampa country in *Gōdāvari Lower* and for preparing a scheme for the Chentsus in *Kurnool West.*

CHAPTER IV.—ADMINISTRATION.

42. *New District Forest charges.*—There were no changes during the year.

43. *New ranges.*—No new ranges were formed but revision of boundaries of some ranges *of Kurnool West* was made.

44. *Conduct of establishment—Executive staff.*—This was on the whole satisfactory and special mention has to be made of the good work of Rangers N. S. Anantacharlu, K. G. Belliappa, S. Ramaswami Ayyar, Alur Kristna Rao, R. Veeraswami Nayudu, N. L. Narasimham, K. P. Benjamin, H. Rama Rao, Hussain Khan, C. G. Ganapathi, G. J. David and C. S. King and of Deputy Rangers K. Tiruvenkatachari, N. Chakrapani Ayyangar, S. Siviah, T. G. Venunatha Rao, Sankaram and A. Sita Rama Rao. The following were punished for bad work :—two Rangers were reduced, two Deputy Rangers were dismissed and six Deputy Rangers suspended.

Protective staff.—The work and conduct of this branch is found to improve after training given in the Vernacular Training schools; but the list of punishments continues to be long. One Forest Guard and two Watchers were convicted; one forester, two forest guards, five watchers and two tannahdars, were dismissed; one forester, 21 forest guards, 45 watchers, three tannahdars, two permit gumastahs and one gardener were removed; nine foresters and two forest guards were reduced; 24 forest guards, 21 watchers one permit gumastah, one coupe gumastah, four tannahdars and one gardener were suspended and three forest guards and one tannahdar resigned.

Ministerial staff.—Its work and conduct as a whole was satisfactory. Two Range clerks and three Range peons were dismissed, one District Forest officer's clerk and two Range clerks were reduced, one Range clerk was suspended and one Range clerk resigned.

45. *Health of establishment and casualties.*—The health or establishment was bad as usual and notoriously so in *Ganjām* and *Gōdāvari Upper*. The ailments generally were from malaria and spleen and to some extent cholera, small-pox and guinea worm. A dispensary was opened at Gazilabadi, the head-quarters of Pondakhol (Agency) Range in *Ganjām* district. A large number of subordinates went on sick leave and about 20 of the inferior service resigned owing to ill-health. One clerk of the District Forest office *Ganjām*, died of blackwater fever; and one peon of his, one forest guard of *Vizagapatam*, one accountant of *Gōdāvari Upper*, one surveyor and one watcher of *Gōdāvari Lower*, the Head clerk of the District Forest office, one forester and one watcher of *Kistna* two foresters, one forest guard, one Plantation Overseer, one gardener and one Range clerk of *Kurnool West* died of malarial fever and one Range clerk of *Kistna* from cholera.

46. *Relation between Revenue and Forest officials.*—This continued to be cordial but for a small friction in *Kurnool West* between the Ranger and the Tahsildar over the preparation of certain returns in the Taluk office.

47. *Service books.*—These were maintained and verified in all districts.

48. *Tours of Forest Member.*—The Hon'ble Mr. R. C. C. Carr toured in the forests of three *Kurnools* and his successor the Hon'ble Mr. H. F. W. Gillman *in Kurnool East and South.*

Tour of the Conservator.—Mr. A. W. Lushington was in charge of the Circle throughout the year and toured for 213 days visiting all the forests and inspecting all the District Forest offices. He toured also in estate forests of Jeypore, Modgole and Vizianagram to give advice.

Tours of District Forest Officers.—All the District Forest officers but Mr. Murray toured more than the prescribed period and the short tour of Mr. Murray was due to his indifferent health. Mr. Seager of Gōdāvari Lower had to spend over three months in Rampa in connection with the selection and survey of blocks in that area.

Inspection of Range offices.—All the range offices were inspected during the year.

Audit of accounts of District Forest offices.—The accounts of 1914–15 of all the District Forest offices except *Kurnool East* and *West* have been inspected by the Auditors from the Accountant-General's office and reported to be satisfactory; in *Kurnool East* and *West* accounts up to 1913–14 alone were inspected and reported as satisfactory.

Forest College, Dehra Dun.—One probationer for Provincial service, sent to this Circle for practical training, joined the College after undergoing training in *Kurnool East* successfully.

49. *The Madras Forest College.*—As in the previous year six Government students were deputed to the ranger's course commencing from 1st August 1915. One private student attached to this Circle for practical training joined the College after successfully passing through the course in *Kurnool South.* The four that returned this year from the College have all obtained higher standard certificates and of them J. A. Paul D'Cruz won the Brazier Prize. Out of the six students sent for 1914–16 course one was sent back as unfit to follow the course.

Vernacular Training School for Foresters and Forest Guards.—Owing to lack of facilities in former years few Uriya candidates had the advantage of being trained; during the year under report ranger S. Ramaswami Ayyar who was long in *Ganjām* and knows Uriya well was selected as Senior Instructor and given the assistance of A. J. M. Snaize as Junior Instructor. Twenty-eight students of whom ten were Uriya forest guards were sent up, six students had to be withdrawn, one on account of a serious accident and the rest owing to protracted illness; out of the remaining 22 six passed in the first class, seven in the second class, and nine in the third class. Ten out of the 22 successful candidates were the Uriya speaking men from *Ganjām.*

50. *Work and service of Superior officers.*—The following Collectors have commended the work of their District Forest officers to the following effect:—

Ganjām.—Mr. Minchin has shown conspicuous tact and energy in all branches of the work. Mr. G. S. Ladrado's work both as District Forest officer and Extra Assistant Conservator has been excellent and his knowledge of building and road-making has been of the greatest assistance to the District Forest officer.

Gōdāvari Lower.—Mr. Elwin has expressed his continued satisfaction with the work of Mr. Seager and his appreciation of his work in Rampa.

Kurnool.—Mr. Clear and his Assistant Mr. Stracey have done good work; Mr. Thompson has worked hard and conscientiously; Mr. K. G. Belliappa Extra Assistant Conservator on probation, worked hard.

The Conservator has nothing to complain of in the work of any of the Divisional officers; all have worked well, and Mr. Rigold appears to have gained the confidence of the Koyas, who are beginning to turn out some useful work, in the *Upper Gōdāvari.* Mr. Murray, after three years extension, has now retired from *Vizagapatam.*

51. *List of Vernacular names of trees.*—This has been published.

CHAPTER V.—GENERAL.

(*a*) Rules under the Forest Act.

52. *Timber Transit Rules.*—(i) These rules everywhere worked satisfactorily; they were revised for *Ganjām* and found to work well; in *Vizagapatam* they are now better understood and worked: the location of a Tana was shifted to a more advantageous position and cases show a tendency to fall; in *Gōdāvari Lower* the checking offices at Polavaram and Kotilingala were placed under Deputy Rangers; *in Kistna* the Tana stations and schedules were revised and *in Kurnool West* the rules were extended to Yerramalais ranges which, besides being helpful to ryots in preserving their own timber, are reported to have stopped already stealthy removals under cover of spurious permits granted by village officers and Jaghirdars.

(ii) *Rules under section 26 of the Forest Act.*—The privileges allowed by these rules were generally availed of by the people and no complaints or abuses of any kind were brought to notice except from *Ganjām* where a serious abuse in connection with the valuation of tree growth on darkhast land was detected and the Deputy Ranger concerned was dismissed and from *Kurnool West* where it is said that in the Yerramalai ranges a tendency exists to steadily denude the unreserves for carrying on a regular trade in timber and fuel. Rules for the management of forests and waste lands in Pondakhol mutta of the *Ganjam* Agency were sanctioned by Government and published. The special darkhast rules in force in that district have been cancelled as circumstances have changed.

(iii) *Rules framed for the collection and disposal of drift wood.*—Under the orders of the Board the revision of the rules in the light of the suggestions made by the Honourable the Advocate-General is under correspondence. The leasing system has been abolished and the work is at present being attempted by Departmental Agency with the assistance of village officers.

(iv) *Rules for the guidance of Forest officers in compounding Forest offences.*—The rules worked smoothly and well except for a case in *Ganjām* where a Deputy Ranger was severely beaten in the execution of his duty in this direction and the case is *sub judice*; in *Kurnool West* the time-limit for the payment of compounding fees was in many cases exceeded.

(v) *Rules framed under the Forest Act for private forests.*—These worked smoothly and without complaint. In Malkangiri, part of Jeypore estate, more activity appeared in detecting and prosecuting cases; as the number was unusual a special enquiry by the Deputy Tahsildar of the place was instituted but his report contained misstatement of facts and the Revenue Divisional Officer was of opinion that local enquiry during tours would be more advantageous than judicial enquiry. The forest rules were extended during the year to Kurupam, Peddamerangi and Chinnamerangi estates. Selection of areas for reservation was begun and lists of proposed forest blocks in Peddamerangi and Chinnamerangi were sent to the Zamindars concerned for opinion, in the Kurupam estate survey of one block was completed and proposals made for its reservation. The control and management of Madgole forests was transferred to the Court of Wards during the year and application has been made for the extension of these rules to them.

(*b*) Supply of forest produce to meet the wants of the people.

53. (i) *Coupe and Depot system.*—The efforts of the department are always being directed towards meeting the local wants of the people. While the cutting, collection and sale of timber fuel and bamboos was being transferred to private individuals every endeavour is being made to encourage those individuals to effect retail sales in the same way as formerly in Government depots. There were no complaints from the public against the contract system or want of produce except from *Kurnool West* where owing to the inexperience of the contractors the demand for agricultural implements was not fully met with. The permit system is not in force except for grazing and removal of minor forest produce. In *Vizagapatam* however permits were issued for all produce on unreserved areas and for bamboos in Dharakonda and Sinivaram reserves. Timber, fuel and bamboos are being generally sold now in coupes standing. In *Gōdāvari Upper*, people obtain ample supplies of fuel and small timber from the unreserves and in Bhadrachellam taluk in particular the inhabitants are allowed to remove classified and unclassified timber from unreserves free of cost for domestic and agricultural purposes; this concession is restricted in the case of Nugur taluk to only unclassified trees. In *Gōdāvari Lower* the working of mangrove areas in the Kandikuppa and the Coringa reserves for supply of fuel to fishermen at fixed rates has been continued. In *Kurnool East* the demand for timber and agricultural implements was generally met from the grazing lines cut in all the ranges, more than 300 sets of spokes and felloes were made out of dead teak and yegi trees by Chentsus in the Gudem Range and sold to contractors at fixed rates, agricultural implements made from dead and dying yepi trees by the Chentsus of Dornal Range were also sold to the public at fixed rates. Fuel which resulted from cutting fire lines was offered for sale but none would purchase as the villagers have their full supply from unreserves. In *Kurnool South*, in order to introduce healthy competition amongst contractors short lengths (2 to 5 miles) of fire lines were sold for the small capitalists to remove the produce thereon and sell to the public. In *Kurnool West* difficulty of transport was experienced and it is under contemplation to purchase some boats to carry forest produce on the Kurnool-Cuddapah canal.

54. *Free removal of grass.*—This was permitted in *Vizagapatam*, *Gōdāvari Lower*, *Kistna*, and thre, *Kurnools*, and was freely availed of by the ryots. No instance of abuse was brought to light.

55. *Hill tribes.*—In *Ganjām* the assistance practically of all the Khonds living adjacent to or inside of reserves was taken in fire and general protection of forests. The Pondakhol Khonds are becoming used to forest departmental works. They are given rewards for successful fire protection; Gumsur Khonds were given for such services concessions such as timber for ploughs, bamboos and thatching grass for repairing their houses, fuel and minor produce for their own use. In *Vizagapatam* care was taken to avoid giving the hillmen cause for complaint against the working

of the forest laws so long as they did not abuse the privileges given to them. The villagers of Kondasantha failed to render assistance in extinguishing forest fires and burnt an area of about 3,000 acres in consequence of which their privilege of grazing 200 head of cattle in the Sinivaram reserve was suspended. In *Godāvari Upper* the Koyas and the Reddis did good work in clearing fire lines and in general protection of forests. Special rewards for successful fire protection in Bhadrachellam and Nugur taluks were distributed in person by the District Forest officer and his Gazetted Assistant. In *Gōdāvari Lower* the Koyas and Reddis of Polavaram and Yellavaram divisions rendered good service in the matter of fire and general protection of forests; their services were also utilized in road and building works for which they were not only liberally rewarded but were allowed several concessions. In *Kurnool East* the Chentsus rendered satisfactory assistance in putting out fires for which the Board was pleased to sanction the free distribution of cloths worth Rs. 1,162. This reward was distributed in proportion to the area of the forest successfully fire protected during the previous fire season and when the value of the cloths supplied exceeded the reward amount the difference was recovered when payment was made for work subsequently done. The Chentsus were employed on works such as collection of minor forest produce, line cutting, fire protection, preparing agricultural implements, cutting back bamboos, fashioning line timber, bunding up vagus, on bridle paths and construction of foot-paths. A start has also been made in one of the worst gudems (Chilakacherla) in the work of splitting bamboos and the results obtained, so far, is sufficient to make one hope that this industry can be gradually extended to several other gudems where the bamboos grow in profusion. There being an extensive demand for bamboos splits it will always be possible to sell the produce at a handsome profit on the spot. In *Kurnool South* the Chentsus at Ahobilam were employed in fire protection works and weeding operations. All the able bodied Chentsus at Ahobilam, Baireni and Mahanandi are employed as fire patrols in the Department. In *Kurnool West* the Chentsus were employed on the teak and sandal plantations in the collection of minor forest produce and in fire protection operations. The teak plantations are likely to come to a close for want of water for irrigation and efforts have been made to train the Chentsus in elementary road work while lac and mulberry cultivation has been started with a view to divert their attention to some useful and permanent occupation. They are generally too lazy to grow field crops which is fortunate from a forest point of view, otherwise a merciless felling of trees for podu cultivation as in the Circars would have denuded the forests. The Chentsus show signs of becoming amenable to discipline and it is hoped that the rigorous development of elementary education of the children will make the rising generation still more tractable. They are by no means inefficient at simple forest work and when put on to contract work they develop surprising energy in order to get away and have their afternoons free. The bunding of jungle streams by rough stone dams has been started, and there is an unlimited supply of this useful though not immediately remunerative work, it is remarkable how quickly and how well they will do this work when they know that a fixed price will be paid for each bund. During the year Government appointed Mr. Hood, I.C.S., to be a special officer for Chentsus for six months from January to July 1915. He visited a good number of the gudems in all the three divisions and is said to have submitted a report on the subject.

56. *Cultivation in reserved forests.*—In *Ganjām* some Khond families of Kumbharibadi (Chinnakimidy Maliahs) have been settled on certain old wet lands in the north-west corner of Pondakhol reserve as sufficient other hands were not available for forest purposes. In *Vizagapatam* the lease of the area in Chintapalli reserve was renewed and on resurvey the area was found to be 57·50 acres and the lessee was charged with the assessment on the excess area of 2·50 acres. In *Kurnool East* an extent of 65·25 acres was granted free of assessment to the Chentsus of Maddipenta, Peddachama, Chintala, Marripalem, Peddamantrala, Chinnamantrala and Murikimallapenta at ·25 per each family besides the area of 111 acres 47 cents which was given to the Chentsus of Garapenta and Chennapalempenta on annual assessment of two annas an acre. The above grants were on condition of helping the Forest department in extinguishing forest fires. In *Kurnool South* four acres of land was assigned to the Police metta talayaries at Payalakanama metta as an exchange for

services rendered to the Police department. In *Kurnool West* the lease of 74 acres in the Gadedamadugu reserve * on the temporary annual lease system was continued. This land will probably be thrown out of reservation and put up to auction.

57. *Mining and prospecting.*—In *Kurnool South* the 30 years license for prospecting for diamonds in Ramavaram reserve granted to Mr. A. Ghose remained unworked during the year; in *Kurnool West* mining leases for 30 years were granted to Messrs. A. Ghose and Charles Jambon for lead ores, to Mr. A. Ghose for diamonds and to Messrs. Beardsell & Co., Madras, for barytes. Two licenses for prospecting for diamonds were also granted to Mr. A. Ghose.

58. *Realization of revenue from the usufruct of toddy-yielding trees on Government waste and poramboke lands.*—The revenue realized was in *Ganjam* (Rs. 1,611), *Vizagapatam* (Rs. 576), *Gōdāvari Lower* (Rs. 4,713), *Kistna* (Rs. 7,729), *Kurnool East* (Rs. 1,212), *Kurnool South* (Rs. 2,335), and *Kurnool West* (Rs. 13,774).

(*c*) Live and Dead Stock.

59. *Live stock*—(*a*) *Elephants.*—All the elephants in the Circle except one in *Ganjām* and one in *Kurnool West* kept good health during the year; the one in *Ganjām* was ordered to be sent to Thippakadu in the Western Circle, for recruiting health in congenial surroundings and in its place a good working elephant was ordered to be supplied from that Circle; the elephant in *Kurnool West* was laid up with an ulcer for some time but recovered. A second elephant "Kapila" was supplied to *Gōdāvari Upper* from the Western Circle.

(*b*) *Bullocks.*—The departmental collection of timber and fuel having been stopped 10 pairs were transferred from *Kurnool South* to *Kurnool West* and these are now employed in carrying provision for subordinates and departmental shops and are hired to forest contractors for carting materials to work spots and to Government officers on tour for the carriage of their saman. They will be employed largely in the construction of new roads and buildings. Out of the ten bulls remaining in *Kurnool South* one has to be sold being very old and one out of the 20 supplied to *Kurnool West* was killed by tiger; in its place a new one was purchased for Rs. 50.

Inventory of valuable stock.—The stock registers were maintained and verified in all the districts. The unserviceable monorail in *Gōdāvari Lower* was sold to the Coromandel Company for Rs. 500 during the year.

Rain gauges.—These are in all the districts and the readings were properly recorded, *vide* Appendix D. The rain gauge at Bendamurlanka in *Gōdāvari Lower* got out of order and has been sent for repair. Two new stations in *Kurnool South* at Sandrapodu and Chintalapalli were sanctioned during the year but not yet constructed.

(*d*) Suits.

60. In *Gōdāvari Upper* a late contractor has given notice of suit, in *Gōdāvari Lower* the appeal regarding the Coringa (proposed reserve) extension is still pending before the Privy Council and the suit brought by M. Subba Rao for Rs. 800 against the Forest department has been decided in favour of Government. In *Kurnool West* one G. Seshiah of Atmakur gave notice that if the value of timber purchased by him but not handed over were not refunded to him he would institute a suit, the matter is under correspondence.

61. *Classification of reserves under orders of Government on the Forest Committee's report.*—In *Ganjām* as a result of the classification seven small and useless reserves were proposed for disafforestation. Arrangements are being made to hand over 2 class IV reserves to panchayat management; the people concerned show interest in the affair and the attempt seems to meet with success. In *Gōdāvari Upper* all the reserves have been classified and orders of the Board awaited. No forests in this district need panchyat management. In *Gōdāvari Lower* the proposals sent were returned for revision and have recently been resubmitted. In *Kistna* the classification has been approved by the Board This was the only district in this Circle where panchayat

* Granted to the Christians of Gadethemadugu village.

management has been tried. Of the five reserves Gudemetla, Balasupadu, Gandrayi of Bezwada Range and Chintalapudi and Velagalapalli in Ellore Range handed over to the panchayat the working in the former three was reported to be satisfactory and in the latter two fairly so. In *Kurnool South* the proposals are under consideration of the Collector.

62. *Improvement of water-supply and grazing facilities in Government grazing grounds.*—In *Gōdāvari Lower* several estimates have been sanctioned-works taken on hand to improve water-supply; and in *Kurnool South* two kuntas in the grazing grounds of Owk Range were repaired during the year. The other reports are silent on this point.

63. *Opening small fuel coupes for rural supply wherever an effective demand exists or can be stimulated into existence.*—In *Gōdāvari Lower* no necessity has arisen as there is enough of waste lands to meet all such demands; in *Kurnool South* small coupes in grazing areas are being marked for sale, and also standing materials on fire lines to be widened or newly cleared have been sold in small lots in Chelama Giddalur and Sirvel Ranges to meet such demand.

64. *Gang system.*—The system is being introduced everywhere in the Circle and the result of the working will have to be watched. Want of sufficient establishment for successful working is already felt in some districts; the proposed reorganization of the executive and protective staff will, it is hoped, relieve the strain.

OFFICE OF THE CONSERVATOR OF FORESTS,
NORTHERN CIRCLE,
6th September 1915.

A. W. LUSHINGTON,
Conservator of Forests,
Northern Circle.

INDEX.

FOREST ADMINISTRATION REPORT,

MADRAS PRESIDENCY,

CENTRAL CIRCLE, 1914–1915.

Chapter.	Subject.	Paras.
I	Constitution of State forests—	
	1. Alteration in area	1
	2. Forest settlement	2
	3. Demarcation	3
	4. Forest surveys	4 to 6
II	Management of State forests—	
	1. Regulation of management—	
	(*a*) Preparation and control of working-plans	7 & 8
	(*b*) Annual plans of operations	9
	2. Communications and buildings—	10
	(*a*) Roads and bridges	11
	(*b*) Buildings	12
	(*c*) Miscellaneous	13
	3. Protection of forests—	
	(*a*) General protection	14 & 15
	(*b*) Protection from fire	16
	(*c*) Protection from cattle	17
	(*d*) Protection against injuries from natural causes	18
	4. Sylviculture—	
	(*a*) Natural reproduction	19
	(*b*) Artificial reproduction	20
	(*c*) Operations for the improvement of the growing stock ...	21
	(*d*) Experiments on species	22
	5. Exploitation—	
	(*a*) System of management—	
	(i) Major forest produce (Sylvicultural systems) ...	23
	(ii) Minor forest produce	24 to 28
	(*b*) Agency of exploitation	29
	(*c*) Outturn and sources of forest produce	30
	(i) Departmental agency	31
	(ii) By purchasers	32
	(iii) Rights and privileges	33
	(iv) Free grants	34
III	Financial results	35
IV	Administration	36 to 52
V	General	53 to 69
	Appendices A, B and Annual Forms Nos. 65 to 85 (except 68).	

FOREST ADMINISTRATION REPORT OF THE CENTRAL CIRCLE

FOR THE

FOREST YEAR ENDING 30TH JUNE 1915.

CHAPTER I.—CONSTITUTION OF STATE FORESTS.

1. Alteration in Area.

Reserved Forests.—The total area decreased from 5,788 to 5,770 square miles. One hundred and sixty-one acres were added by transfer from reserved lands and there was a reduction of 11,780 acres by disafforestation and by correct computation of area.

Reserved lands.—Two hundred acres consisting of enclosures and extensions to existing reserves were newly constituted reserved lands. One hundred and sixty-one acres were transferred to reserved forests. The area at the close of the year was 73 square miles of which 63 square miles constitute the leased forest in *Bellary*.

2. Forest Settlement.

2. The reservation of the enclosure to the Neraniki reserve in *Bellary* though notified in 1913-14 took effect only from 1st July 1914. One block in *East Cuddapah*, one in *Chingleput*, and three blocks in *Chittoor* aggregating less than one square mile were finally settled during the year. One block in *Anantapur* nearly 10 square miles in extent was finally notified although reservation took effect after the close of the year. Two blocks are pending final disposal by the Forest-Settlement officers and seven blocks have been notified under section 4 and are undergoing settlement.

3. Demarcation.

3. Sixteen miles of boundaries were newly demarcated at a cost of Rs. 830, and 3,739 miles of boundaries already demarcated were kept under repair or rectified at a cost of Rs. 12,373. Two hundred and sixty-seven miles of permanent demarcation with solid stone pillars surrounded by well-packed cairns of stones, and with a lock-spit or a two-feet wide stone alignment between the cairns, were completed.

4. Forest Surveys.

(*a*) *By Survey of India.*

4. The Survey of India did no work in the circle. The index map of the Madras Presidency was published during the year.

(*b*) *By Departmental Surveys.*

5. Alignment of roads, surveying disputed localities and coupes, verification or rectification of boundaries, and the preparation of coupe, working plan and fire maps were carried out by the departmental staff.

(*c*) *Maps.*

6. The reference maps referred to in section 80 of the Forest Code were maintained and posted in all the districts.

CHAPTER II.—MANAGEMENT OF STATE FORESTS.

1. Regulation of Management.

(*a*) *Preparation and Control of Working Plans.*

7. *Preparation.*—In *East Cuddapah*, the Seshachellam timber working plan of the Kodur and Rajampet ranges and the Thunukonda fuel working plan of the Kodur Range were sanctioned. In *Nellore*, tentative plans for the forests in the Kavali

and Nellore Ranges were sanctioned; a tentative scheme for the *Anogeissus latifolia* area in the Marlapoody reserve received the approval of the Conservator; and a scheme for the management of the Ayyavaripalle reserve was under preparation. For the Atmakur working circle a working scheme was prepared; but no final orders were passed pending the Conservator's inspection. In *Chittoor*, the Tirupati Range working plan, so far as it affects the Mamandur forests, was revised and the revision was sanctioned by the Board.

8. *Control.*—In *West Cuddapah*, the working plans for the Lankamalais were cancelled as it was impossible to carry them out. Generally speaking in all districts in which there are working plans deviations therefrom occur on account of want of funds or of establishment to carry out the full programme of roads and buildings; from failure to sell coupes owing to want of demand; from the necessity of opening closed areas on account of local scarcity; and from many other reasons too numerous to detail. There is work in the circle to give full employment to two or three working plan sections for many years in recasting existing plans and in preparing new ones. Major charges like *Bellary* and *Guntūr* have no working plans in actual operation and in other districts most of the existing plans are sketchy and out of date.

(*b*) *Annual Plans of Operations.*

9. The sanctioned plans of operations in several districts were upset by uncertainty of the future management of forests classed as IV and V. In *Bellary*, a number of works were not undertaken owing to restriction in the programme due to classification of forests, amalgamation of the Alur and Adoni Ranges, and the cancellation of working plans in four ranges. In *Chingleput*, there were a few deviations caused by the sale of arrear coupes. In *Chittoor*, the deviations were due to curtailment of expenditure on cultural operations, to postponement of final demarcation pending classification of forests, and to reconsideration of the scheme to build a range office and quarters at Tirupati. In *East Cuddapah*, the timber improvement fellings in the Lankamalais were not started owing to the probability of the market being glutted; certain communications not provided for in the plan of operations were carried out in order to give access to coupes under working or for other urgent reasons; and other works of the kind which had been provided for were postponed. Owing to shortage of money or to reconsideration of the project some building works such as the rest-house at Tankudu; forest lines at Tankudu, Pichureddibhavi, Joti and Yelkundi were not carried out and other smaller works such as the construction of forest lines at Rollabodu and of sheds at Bollapalli, Kodur and Upparapalli were substituted. In *West Cuddapah*, there were deviations from the plan of operations in the working of most of the timber and fuel working circles for the reasons already given. Owing partly to want of funds, partly to the arrears of work from the previous year, and partly to reconsideration of the works themselves the following works were not carried out:—the conversion and extension of the Faridpenta bridle-path, construction of inspection shed at Nadimpalli, construction of a rest-house, range office and quarters at Sanipaya and of a tannah shed and forest lines at Rayachoti and Mudampad. In *Anantapur and Guntūr*, the plan of operations was generally adhered to. In *Nellore*, the scheme of experimental fellings in the Veligondas was abandoned, and the construction of certain buildings, viz., an inspection bungalow at Beripet, and forest lines at Udayagiri, Kanigiri, Amancherla and Sydapuram was postponed or cancelled.

2. Communications and Buildings.

10. The following figures compare the outlay on communications and buildings:—

	1913-14.	1914-15.
	Rs.	Rs.
Roads and bridges	11,764	15,670
Buildings	37,122	33,510
Other works	3,947	2,675

The increase in expenditure on roads occurred chiefly in *East Cuddapah*, *Nellore* and *Chingleput*. There was a decrease in expenditure on buildings in *Bellary* and *Chittoor* owing to restriction of programme.

(*a*) *Roads and Bridges.*

11. In *East Cuddapah*, the construction of a road from Erraneetibandalu to Papanasam, of bridle-paths from Mogilipenta to Papanasam and Gadithalapenta to Umithala and of a cart-track from Sathyalathippa to Chelamabhavi were completed; while the construction of bridle-paths from Thummalabylu to Kodur, from Kondur to Harlabailu and from Rollabodu to Joti; the conversion of Vathalur-Thummalabylu cart-track into a road, and the conversion of the Kanamalopalli-Turkepalle and Kangamadugu-Pullagurapenta bridle-paths into cart-tracks and the construction of a road from Kodivengammabhavi to Kodur were in progress. In *Anantapur*, the Bukkapatnam-Siddarampuram and Bukkapatnam-Amagondapalayam roads were partly constructed. In *Nellore*, progress was made in constructing a bridle-path along the foot of the Veligondas, and from Udayagiri to Bandaganipalli, and in the Boggutla Valley. In *Chittoor*, the Mamandur chatram and Nellipatla-Rangampat roads were partly constructed.

Tramways.—In the Sriharikota Range of the *Nellore* district only 609 tons of fuel were carried by tramway compared with 7,602 tons in the previous year owing to the failure of the felling contractor to carry out his agreement. In the Coast Range 6,308 tons of fuel were carried. The tram-lines and trucks remain the property of Government but are no longer used for departmental operations. The use of them is given to the fuel contractors on terms provided in the felling contracts.

(*b*) *Buildings.*

12. In *Bellary*, the subordinates' quarters at Fort-wall and the inspection bungalow at Gudekota were completed during the year. In *Anantapur*, combined range office and quarters at Madakasīra and an inspection bungalow at Kalasamudram were constructed. In *Guntūr*, the Venkatayapalem bungalow was condemned before the work was completed owing to the bad choice of site. It will be dismantled and the material used for reconstruction in a better situation. In *West Cuddapah*, the Veeraballe rest-house and subordinates' quarters at High school were completed. In *East Cuddapah*, the construction of range office at Rajampet, of subordinates' quarters at Gollupalle, Umethala and Mogilipenta and of rest-houses at Aremanipenta and Kondur was completed during the year. In *Nellore*, the range office at Dachur was built. In *Chingleput*, the rest-house at Allikuli was partly built.

(*c*) *Miscellaneous.*

13. A number of petty works were carried out in the circle of which the most important were the digging of wells and the improvement of water sources in the grazing blocks, on which Rs. 2,400 were spent. Various other works are mentioned in detail under head 4 (*c*).

3. PROTECTION OF FORESTS.

(*a*) *General Protection.*

14. The following statement gives the number and classification of forest offences compared with the previous year:—

Class.	Injury to forests by fire.		Unauthorised felling or appropriation of wood and minor forest produce.		Grazing without permission or in tracts in which grazing is prohibited.		Other offences.		Total.	
	1913–14	1914–15.	1913–14.	1914–15.	1913–14.	1914–15.	1913–14.	1914–15.	1913–14.	1914–15.
1. Cases taken into Court.	10	2	1,228	1,251	867	897	111	121	2,216	2,271
2. Cases compounded.	4	3	4,313	4,440	2,993	3,335	353	209	7,663	7,987
3. Cases undetected.	197	123	188	266	247	297	1	2	633	688
Total ..	211	128	5,729	5,957	4,107	4,529	465	332	10,512	10,946

The increase in the total number of forest offences dealt with during the year is almost entirely due to illicit grazing of which more cases were reported in all districts except *Bellary* and *Nellore*. The figures in the above statement do not however accurately represent the facts, especially with regard to undetected cases. Thousands of offences the perpetrators of which were not detected are not reported at all, and in respect of injury to forests by fire the 123 undetected cases given in the above statement chiefly relate to the *Anantapur* and *Chittoor* districts which alone report 112. In other districts the administration reports have no reference to undetected cases unless the fire has been the subject of special investigation, which is often not the case.

The percentage of acquittal of forest cases taken to court was 9·66 compared to 8·98 in the previous year.

Seven thousand two hundred and eight cases were compounded for Rs. 76,379 compared to 6,876 cases compounded for Rs. 67,758 in 1913–14.

The punishments awarded by Magistrates are said to have been generally adequate.

Rewards were given sparingly in most districts for the successful detection of forest offences and amounted to Rs. 1,685.

15. *The Rules for the Guidance of Forest Officers in compounding Forest Offences* were observed throughout the circle.

(*b*) *Protection from fire.*

16. The area under fire protection during the year was 1,835 square miles compared to 2,091 square miles in the previous year, and the area reported to be burnt was 121 square miles compared to 150 square miles in 1913-14. A considerable portion of this area is however nearly immune to fire and the protection afforded is little more than the clearance of boundary lines and the attention given by the ordinary staff.

In the *Bellary* district the Sandur forests and some reserves adjoining them, some sandal and palmyra topes and the fuel coupes after felling were systematically fire-protected. These areas were protected with success. Elsewhere there were extensive fires especially in the partially protected Harpanahalli forests and in Adoni Range while in the unprotected forests about 18,000 acres were burnt. The cost of fire protection in the Sandur leased forests continues to be high; means of reducing it without loss of efficiency are under consideration. In *Anantapur*, 420,314 acres are reported to be under protection but in by far the greater portion of this area there is no more protection than is given by the presence of a small protective staff. The District Administration Report gives very little information on the subject and although the number of fires reported is the largest in the circle the percentage of successful protection is given as 97·62 per cent. In *Guntūr*, there were as usual practically no fires owing to the absence of grass in the dry over-grazed forests of this district. During the current year the employment of the special fire protection establishment has been stopped. In *West Cuddapah*, the experiment was tried of abandoning some of the inter-divisional and external fire lines in place of greater activity by patrolling parties. Whether owing to this departure or to other causes the results of the year's work were unsatisfactory and the proportion of failure rose from 6 to 17 per cent. and was probably higher if the burnt area could have been correctly measured. In *East Cuddapah*, the same experiment was conducted with the same results, the burnt area being 119 square miles compared to 43 square miles in the previous year, although as in *Cuddapah West* division the staff worked very hard to control the fires. The whole question of fire protection is now under consideration by the Board. In the *Cuddapah* district fire protection is an extremely difficult matter. The heat in April and May is almost unbearable, there is little water and less shade in the hill forests, the main hill blocks are very difficult of access and there are few interior communications by which the scene of a fire can be reached before the fire has got beyond control. Fires are chiefly caused by incendiarism for the benefit of the early grass and one of the most urgent reforms is the closure of the valuable red-sanders forests in the Cuddapah hills to any form of grazing. In the *Nellore* district, the only forests which suffer severely from fire are those of the

Veligonda Hills. During the year under report the systematic fire protection introduced by the District Forest Officer was generally successful and the fires which occurred were due to burning material being borne by the wind across the zamindari and Government fire-traced boundaries. In *Chingleput*, the only forests under systematic fire protection are those of Nagalapuram and Kambakkam, in the former of which 352 acres were burnt. The cost of protection of these two forests amounts to the high figure of Rs. 24 per square mile and the matter is under enquiry. In *Chittoor*, 212 square miles out of 214 square miles under special protection were free from fire. There were one or two cases of deliberate incendiarism and refusal by the villagers of assistance. They have been dealt with by closure of the burnt area to grazing.

The origin of fires is given in Appendix A.

(c) Protection from cattle.

17. The area closed and opened to grazing is given in statement No. 73. It will be noted that goats are being excluded from the forests of all districts in accordance with the arrangement which gave the goat-owners three years grace in which to reduce or dispose of their flocks. The total number of cattle grazed in the forests of the circle, amounted to 1,593,128; a small increase of 3,600 head over the number grazed in the previous year; but the revenue increased from Rs. 2,70,931 to Rs. 2,99,154 owing to the increased kancha rents in *Nellore* and to enhanced fees of goats throughout the circle. The general incidence of grazing still remains far too high to permit improvement of the forests in many parts of the circle. In *Guntūr* the present incidence is 1 cow unit per 1·80 acres throughout the forests of the district; and in *Chingleput* to 1 cow unit to 1·20 acres. The classification of forests having been completed grazing schemes for the various districts of the circle are now under consideration. That for *Guntūr* was submitted in March 1915 and was sanctioned by Government after the close of the year.

The nuisance of the semi-wild cattle on the Sriharikota island was mitigated by the capture of 179 animals.

An analysis of the cattle impounded during the year with the average of three years is given in Appendix B.

(d) Protection against injuries from natural causes.

18. *Lantana* was eradicated to a small extent at Ramandrug and at Horsleykonda and prickly-pear was removed from parts of some reserves in *Bellary*. In *West Cuddapah*, the *Pterocarpus santalinus*, *Anogeissus latifolia*, *Strychnos Nux-vomica* and *Eugenia Jambolana* were defoliated by some unidentified caterpillar pest.

4. SYLVICULTURE.

(a) Natural Reproduction.

19. There is little of interest in the circle to report. Seedling reproduction has three great enemies in drought, fire, and cattle and a strong flush of seedlings on the ground during the monsoon inspires no great hopes in the District Forest Officer except where the reserve happens to be under strict protection. The sandalwood has been long established in *Cuddapah*, *Chittoor* and *Bellary* and recently so in *Anantapur*. It is rapidly spreading in the last three districts as the trees mature and birds carry the seeds. Coppice reproduction in the felled coupes is reported to have been satisfactory in all districts except *Guntūr* where the difficulty of protecting the regrowth from cattle is particularly great, and where the crop is usually so poor that reliable contractors cannot be persuaded to undertake the work of felling.

(b) Artificial Reproduction.

20. *Regular plantations.*—Further planting has been abandoned throughout the circle and the casuarina plantations on the coast are being gradually sold. Some small expenditure was incurred in watering existing plantations in *Chingleput* and Rs. 4,188 were spent in *Nellore* for the same purpose.

Cultural operations.—In *Bellary*, departmental cultural operations were confined to an expenditure of Rs. 260 on mound sowing in some reserves of the Adōni range and to the sowing of sandal in the Kotekal reserve. Afforestation by the lease of

land to ryots for cultivation combined with sowing of the seed of forest trees was carried out in Halaharivi and Badanahal reserves with moderate success. In *Anantapur*, cultural operations for the spread of sandal were carried out in Amagondapalayam, Kadiri and Penukonda reserves at a cost of Rs. 271 ; the results in two out of the three operations were satisfactory. In *Chittoor*, the seed of *Red Sanders* was dibbled on mounds in the Chittoor reserve, but the result was a failure. The dibbling of sandal seed in the reserves of the Palmaner range continued to give fair results.

(c) Operations for the improvement of the growing stock.

21. *Timber improvement fellings.*—In *Cuddapah East*, 800 acres of forest were felled over. *Coppice felling* continued to be carried out in all districts of the circle for the supply of firewood. Provided the coupes can be subsequently protected from cattle there is no better preliminary method of restoration than that of cutting back the degraded scrub jungle which forms so large a proportion of the forest area in the central circle. *Fencing* of felled coupes was carried out in all districts by dead thorn hedges, by aloe hedges planted on mounds, or by prickly-pear. The first of these methods is by far the cheapest and easiest ; but the fences only last for a short time and are often impossible to maintain for want of material. The question of protection of coupes in a forest which is open to grazing is one of the most difficult with which the department has to deal in this circle. *Stone-walling* which is by far the most effective method of protection from trespass was carried out in *Bellary*, *Anantapur* and in *Cuddapah* at a cost of Rs. 8,500. The cost is however often prohibitive and it is not a method which can be widely used. It had to be stopped in the first two of the above districts owing to the increasing cost. *Bunding of streams* was carried out on a small scale in *Chittoor*, *Cuddapah* and *Bellary*. Experience in *Cuddapah* shows that there is no use in throwing bunds across streams on the steeper hill slopes. The water percolates through the rocky bed and no deposit is formed.

(d) Experiments on species.

22. There is little of interest to report. The *Mahogany* in the *Cuddapah* district continues to do fairly well and *Eucalyptus globulus* in the Palmaner range of *Chittoor* district is thriving while it is dying out in *Cuddapah*. *Dalbergia sissoo* cuttings in the Moka plantation of *Bellary* established themselves successfully. Ten plants of *Acacia auriculiformis* still survive in *West Cuddapah*.

5. Exploitation.

(a) System of management.

(i) Major Forest Produce.

23. The total area under working plans was 1,820 square miles and the areas treated under different sylvicultural systems are shown below :—

	Square miles.	Percentage of total area under each sylvicultural system.
1. Method of clear felling by compartment	7	·39
2. Simple coppice	8	·44
3. Coppice with standards	743	40·82
4. Method of improvement fellings	217	11·92
5. Area closed to felling or worked under no definite sylvicultural system	845	46·43
Total ...	1,820	100·00

(ii) Minor Forest Produce.

(1) *Miscellaneous Produce.*

24. The right to collect minor produce was leased out to contractors as usual in all the districts, except in the Sriharikota Range of *Nellore* district where for special reasons the produce was collected and sold departmentally. The increase in price of leaf-manure to Rs. 2 per cart load in *West Cuddapah* and *Nellore* had a deterrent effect on the demand.

Permits continued to be issued for stone, earth and road materials.

(2) *Extraction of fodder.*

25. The Military Grass Farm Department held leases of areas in *Bellary*, *Anantapur* and *East Cuddapah* and removed hay at Rs. 2 per ton. Mr. Howes, an independent contractor who took on lease the closed compartments of the Bellary Range and certain compartments of the Donimala block, removed 240 tons of hay.

(3) *Free Removal of Grass.*

26. Free removal of grass was allowed in all the districts except *Guntūr* and *Chingleput* where there was either no grass to remove or little demand for the concession. The concession of free grass removal, which, under reasonable precautions, does more good than harm to the forests, was freely taken advantage of in the other districts. The concession was temporarily withdrawn in certain cases in the *Anantapur* district as the villagers adjoining the forests had failed to help in putting out fires.

(4) *Hay-making.*

27. The departmental manufacture of hay was abandoned. $15\frac{7}{8}$ tons of the previous year's stock in *Guntūr* was sold for Rs. 156.

(5) *Grazing.*

28. The revenue realized during the year was Rs. 2,99,154 against Rs. 2,70,931 in the previous year. There was an increase in all the districts except *East Cuddapah* and *Chingleput* and the reasons thereof have been given in Chapter III. The decrease in revenue in the *Chingleput* district is due to the handing over of 5 reserves to Panchayat management, to disafforestation of two reserves, and to the closure of certain other reserves. The decrease in revenue in *East Cuddapah* is small and calls for no remarks.

(b) Agency of Exploitation.

29. Departmental exploitation of forests has almost ceased; but small quantities of timber and fuel, obtained in clearing kaucha, coupe and boundary lines, and in opening out roads, were disposed of departmentally. Small quantities of timber were also extracted for departmental buildings.

(c) Outturn and Sources of Forest Produce.

30. The following statement gives the total outturn compared with the previous year :—

Agency of exploitation.	Timber in cubic feet including sandal-wood.		Fuel in cubic feet.		Bamboos in number.		Minor produce (including grass and grazing) gross value in rupees.	
	1913-14.	1914-15.	1913-14.	1914-15.	1913-14.	1914-15.	1913-14.	1914-15.
By Government agency ..	20,567	11,071	100,896	36,063	9,120	12,200	18,941	14,701
By purchasers (including confiscation)	1,585,381	1,065,163	5,688,506	6,584,517	1,766,649	1,833,386	6,92,586	6,31,218
By right-holders	..	..	..	..	..	..	150	151
By free grantees	84,180	38,543	..	..	14,775	17,127	2,457	1,320
Total ..	1,690,128	1,114,777	5,789,402	6,620,580	1,790,544	1,862,713	7,14,134	6,47,390

(i) Departmental Agency.

31. Compared with the previous year the outturn by departmental agency under *timber* and *fuel* decreased owing to stoppage of departmental operations and that under *bamboos* showed an increase as a greater number were exploited for departmental purposes in *Bellary* and *East Cuddapah*. There was a fall under *Minor Produce* owing to the failure to sell the Nux-vomica crop in *Nellore*.

(ii) By Purchasers.

32. (*a*) *Timber.*—The decrease is due to fewer applications for forest land on darkhast.

(*b*) *Fuel* and (*c*) *Bamboos.*—The increase is due to the further extension of the contract system.

Minor produce.—The decrease is due to a smaller collection of Tangedu bark in *Bellary* and to the very marked fall in the demand for mica in *Nellore*, owing to the war.

(iii) Rights and Privileges.

33. Details of the concession of free removal of grass, have been given in paragraph 26 *supra*. In *East Cuddapah*, 807 cattle of the villages of Settigunta and its hamlets were allowed to graze without fee according to the terms of forest settlement. In *Nellore*, the Madigas and Muthrachās on the Udayagiri-Durgam hills were evicted from the top of the hill for abuse of their privileges; but on their representation to Government they were allowed in consideration of their long residence in the locality, to resettle at the foot of the Durgam. The assistance that they need to establish themselves in the new settlement is being given them by the Collector.

(iv) Free grants.

34. The statement below shows the details of free grants made during the year. They were made chiefly for rebuilding houses destroyed by fire. In *Nellore*, palmyra trees and leaves were granted for the construction of huts for the Kavali Erukala settlement, and free grazing was allowed in the tope reserves for 4,489 cow units. In *Chingleput*, the removal of vellal grass was permitted free of cost in certain cases and the free grazing of 81 cows and bullocks was allowed in Guindy Park.

—	Timber.		Fuel.		Bamboos.		Grass and grazing	Other minor produce.	Total. value.
	C. ft.	Value.	C. ft.	Value.	Number.	Value.	Value.	Value.	
		Rs.				Rs.	Rs.	Rs.	Rs.
Right-holders	..	..	..	..	..	..	151	..	151
Free grantees	38,543	3,509	..	..	17,127	246	1,122	198	5,075
Total .	38,543	3,509	..	..	17,127	246	1,273	198	5,226

CHAPTER III.—FINANCIAL RESULTS.

35. The financial position of the year is compared with that of the previous year and the average of the preceding five years in the following abstract:—

—	1914-15.	1913-14.	Average of preceding five years.
	Rs.	Rs.	Rs.
Revenue	10,90,120	11,26,791	11,51,062
Expenditure.			
A.—Conservancy and works including refunds.	2,51,895	2,79,854	4,46,585
B.—Establishments	3,99,058	3,73,845	3,47,133
Total of A and B ..	6,50,953	6,53,699	7,93,718
Net results ..	+ 4,39,167	+ 4,73,092	+ 3,57,344

The net results show a surplus of Rs. 4,39,167 against one of Rs. 4,73,092 in the previous year and of Rs. 3,57,344, the quinquennial average. Of the receipts 30 per cent. were realised from major produce, 28 per cent. from grass and grazing,

31 per cent. from minor produce, and the balance 11 per cent. from miscellaneous items. The total expenditure of the year was divided among heads A, B and C of section 215 of the Forest Code in the following proportion : —A 1 per cent., B 59 per cent. and C 40 per cent. The estimated value of produce at sale depots at the end of the year was Rs. 720 against Rs. 3,044 at its commencement. The revenue outstanding was Rs. 2,67,517-3-6 of which Rs. 12,080-15-5 fell due within the year.

The important variations between the actuals of the year and those of the previous year are explained below :—

Receipts.

(i) *By Departmental Agency.*

	Rs.	
Timber	— 4,145	Due to the stoppage of departmental exploitation of *timber*, *fuel* and *hay*.
Fuel	— 6,068	
Bamboos	— 187	
Sandalwood	— 732	
Minor forest produce	— 4,080	

(ii) *By purchasers.*

The decrease under *timber* is due to a falling off in the sale of trees on darkhast lands in *Guntūr* and *Bellary*. The very large decrease in the revenue from sale of *minor produce* is due to the suspension or part collection of the Tangedu bark lease amounts in *Bellary* and *Anantapur*, and to the general fall in revenue from mica leases in *Nellore;* the war being the direct cause in both cases. On the other hand there was a rise in the revenue under *fuel* due to an increased number of coupes sold under the contract system ; and a rise in the *grazing* revenue due to the enhanced fees for goat browsing in *Bellary*, to the extension of the Kancha system in *Nellore*, and to the increased number of licenses issued for grazing in the upland taluks in Guntūr.

	Rs.
Timber	— 10,632
Fuel	+ 31,035
Bamboos	— 872
Grazing	+ 28,223
Minor forest produce	— 96,967

(iii) *Miscellaneous (including confiscated drift and waif-wood).*

+ Rs. 27,754—the sale of forest land in *Nellore* chiefly contributed to the increase.

Expenditure.

A.—Conservancy and Works.

— Rs. 27,734. The main reasons for the decrease were :—

Stoppage of departmental fuel operations, the discontinuance of hay-making, the short programme of construction of buildings in *Bellary* and *Chittoor* and the curtailment of cultural operations in *Bellary*, *Guntūr* and *Nellore*.

The decrease was partly counterbalanced by the payment of Rs. 6,220 under orders of Government as supplemental compensation to the owners of the Guntūr fuel depot site.

B.—Establishment.

+ Rs. 25,213. The payment of leave allowance to a Conservator, to a Deputy Conservator and to an Extra Deputy Conservator; the posting of a senior Deputy Conservator to *Bellary;* the appointment of an Assistant Conservator, an Extra Assistant Conservator and several additional temporary foresters and guards to districts in the circle, the re-organization of the mica establishment in *Nellore;* the increased touring of officers, and the increased cost of uniforms, all contributed to the increased expenditure under *B.—Establishment.*

CHAPTER IV.—ADMINISTRATION.

36. The charge of the circle was held by Mr. H. B. Bryant until 25th January 1915 and by Mr. S. Cox for the rest of the year.

37. *District and Range charges.*—Proposals for the trifurcation of the *Cuddapah* district were submitted to the Board at the end of the year. There was an addition to the number of ranges in *East Cuddapah* and two of the existing ranges in *Guntūr* and in *Chittoor* were amalgamated. Proposals to transfer to *Anantapur* the small portion of Iswaramala reserve which lies in the *Chittoor* district were pending with the Board.

38. *Work of superior officers—Extracts of Collectors' remarks:—Cuddapah (By Mr. A. R. Bānerji). West.*—"Mr. T. A. Whitehead was in charge of both divisions of the district until 17th July 1914 when he was relieved of the West division by Mr. A. Raju Nayakar whose work has been characterised by zeal. I find he is a keen forest officer and full of energy. The supervision exercised by him over his subordinates and his inspections have been on the whole thorough and efficient." *East.*—"Mr. Whitehead's work has been characterised by keenness and insight and he has been ably assisted by Mr. Abdul Qadir." *Nellore (By Mr. R. Ramachandra Rao).*—"Mr. Arbuthnot was District Forest Officer throughout the year. He is very sympathetic in his attitude towards the public and apprehending rightly that their co-operation is essential for efficiency of forest administration, has frequently forestalled me in meeting the requirements of the people. He does not spare himself in the discharge of work. But expecting the same of his subordinates he is apt to drive his subordinates too much and expect more of them than is possible. If he remains in the district a few years, I am sure, the grazing policy of the district will become practically fixed in a manner satisfactory both to the State and to the people. Mr. S. V. Devadasan, Extra Assistant Conservator, has been busy touring the district and studying its peculiarities under Mr. Arbuthnot's directions. He is a capable and intelligent officer." *Chittoor (By Mr. H. L. Braidwood).*—"Mr. Jackson's work as District Forest Officer was in every respect satisfactory. Mr. D. L. Sathe, Assistant Conservator, is getting a good grasp of forest work and should turn out an efficient Forest Officer."

The Collectors of *Bellary* and *Guntūr* offer no remarks and those of *Anantapur* and *Chingleput* state that as they arrived late in the district they are unable to report on the work of their District Forest Officers.

Conservator's remarks.—I endorse the remarks of the Collectors given above. Mr. Panchapakesa Ayyar in *Guntūr* and Mr. Thornton in *Bellary* have worked hard to bring their divisions into better order and Mr. Gajaraja Mudaliyar in charge of *Chingleput* is a keen and active officer.

39. *Executive establishment.*—The work of rangers is reported to have been satisfactory in one district, moderate in three districts and unsatisfactory in the rest. One Ranger was dismissed but reinstated to a lower grade on appeal to the Board of Revenue after the close of the year. Another dismissed Ranger reinstated on appeal remained on duty for only six months after his return when he was again suspended and charged with criminal breach of trust. He has since been sentenced to six months' rigorous imprisonment and Rs. 200 fine. There were also cases of temporary reduction in grade and suspension pending investigation of charges. In the higher grades of Rangers there are a number of excellent hard working officers of good character; but the lower grades are unfortunately too full of officers with no interest in their profession and with no intention of doing more work than serves to keep them in the service.

The Deputy Ranger grades are largely filled by men under probation and there have been a good many removals of men who have proved unfit for a forest life.

40. *Protective establishment.*—The conduct of the staff continued to be unsatisfactory. One Forester resigned his appointment, five were reverted to Forest Guards or removed from service, five were suspended and four were reduced. Among the guards there were seven resignations, 38 suspensions, six reductions, 58 removals from service, 15 dismissals and three convictions. The present unsatisfactory state

of the protective establishment is partly due to the inferiority of many of the rangers under whom the staff has to work. Under good rangers the protective staff usually does good work.

41. *Ministerial establishment.*—The work is reported to be generally satisfactory. Mr. Gundu Rao, the efficient Manager of the Circle office, was promoted to be Forest Assistant to the Board of Revenue.

42. *Health of establishment and casualties.*—The health of establishment is reported to have been rather better than usual; but there is always a great deal of fever among the staff in certain parts of the circle. One Forester and two Forest Guards died of malarial fever, two Forest Guards died of cholera and one Forest Guard and one watcher were murdered by a gang of sandalwood thieves in the Badvel taluk of *Cuddapah.*

43. *Relations between Revenue and Forest Officers*—continued as usual to be very cordial.

44. *Service books*—maintained and verified in all the districts.

45. *Tours of the Forest Member.*—The Hon'ble Mr. H. F. W. Gillman, I.C.S., inspected the red-sanders forests of Rajampet and Kodur ranges in *East Cuddapah* and the Mamandur and Horsleykonda forests in *Chittoor.*

46. *Conservator's inspection.*—All the District Forest offices in the circle were inspected during the year and found to be in good order. The Conservator inspected some of the forests in *Bellary*, *Guntūr*, *East Cuddapah*, *Chingleput* and *Chittoor.* The total number of days spent in camp was 160.

47. *Touring of District Forest Officers.*—More than the prescribed minimum of touring was done by all District Forest Officers.

48. *Inspection of Range offices.*—All the Range offices were inspected by the District Forest Officers or their Assistants except one in each of the *West Cuddapah*, *East Cuddapah* and *Nellore* divisions. The omission in the second was due to the range having been formed only in November 1914 and in the other two instances they were inspected immediately after the close of the year.

49. *Audit of accounts of District Forest offices.*—The special staff of the Accountant-General's office audited the accounts of all the District Forest offices except those of *Guntūr* and *Chingleput* and the results were as usual satisfactory.

50. *Imperial Forest College, Dehra Dun.*—One Provincial Service probationer, posted for preliminary training to this circle, was deputed to the College and is undergoing training.

51. *The Madras Forest College, Coimbatore.*—One Ranger and four Deputy Rangers were deputed for training during the year. Three Deputy Rangers returned with Higher Standard certificates.

52. *Vernacular Training School.*—The year's session was held in *West Cuddapah.* Twenty-four Guards and three Foresters underwent training and the course had not closed at the end of the year. The school is reported to have done good work under the management of the instructor M.R.Ry. V. N. Seshagiri Rao and his assistant Mr. T. T. Ansep.

CHAPTER V.—GENERAL.

53. *Realizations of revenue from the usufruct of toddy-yielding trees on Government wastes and poramboke lands.*—Rupees 51,407 were realised against Rs. 54,624 in the previous year.

54. *Measures adopted to encourage the growth of manure leaf-yielding plants.*—No measures were adopted.

RULES UNDER THE FOREST ACT.

55. *Timber Transit Rules.*—The existing rules are stated to have worked satisfactorily in *Guntūr* and *Chittoor.* The revised rules for *West* and *East Cuddapah* are reported to work effectively; many illicit removals were brought to light and smuggling was reduced.

56. *Rules under section* 26 *of the Forest Act.*—The privileges allowed under these rules were generally taken advantage of and no complaints nor abuses were brought to light.

57. *Inventory of valuable stock.*—The stock registers are reported to have been maintained and verified in all the districts.

58. *Rain gauges*—were maintained in all the districts except *Chingleput.*

59. *Cultivation in reserved forests with a view to afforestation.*—No new reserves were leased out in *Bellary.* The plants of 1908 in Banavasi reserve have established themselves and are 8 to 16 feet in height and the girth of the margosa saplings is 16 inches. The plants of 1912–13 in Budanahal reserve have also established themselves and are 10 to 12 feet in height. An extent of 300 acres in Halaharivi reserve was sown with margosa and babul in 1913–14 and a fair crop has established itself on the whole area. The sowing was a failure over an area of 60 acres which has however been resown in 1915–16. In *Anantapur*, the cultivation under certain restrictions of a few acres of land by ghat-talayaries continued. *In Nellore*, *West Cuddapah* and *Chittoor* certain plots were assigned to the police ghat-talayaries for the same purpose.

60. *Suits.*—The Moka land suit which was pending at the close of the previous year was disposed of in favour of Government. The appeal preferred by the shrotriemdar of Putlampalli in *West Cuddapah* in 1912–13 was decided in favour of the shrotriemdar during the year under report.

61. *Live-stock.*—Four buffaloes were maintained in *Chittoor* district of which two are reported to be very old and past work.

62. *Mining.*—In *Bellary*, the mining lease for 30 years over 1,609 acres in Harpanahalli taluk granted to Mr. A. Ghouse of Dhone in the previous year, continued to be in force. The application of Mr. A. Ghouse for a lease in the Copper mountains of Bellary Range and that of Mr. A. D. Sanders of Ramandrug General Sandur Mining Company for prospecting manganese ore in Tonasigeri reserve were pending disposal. The prospecting license granted to Messrs. A. M. Jeevanjee & Co., Bombay, for red oxide in Joga and Hospet reserves, was cancelled as they failed to commence operations. The other applications referred to in the previous year's report were either withdrawn, refused or lodged. No fresh licenses were granted. In *Anantapur*, no new licenses for prospecting gold were given and in *Guntūr* the diamond mining operations were in suspension.

Nellore Mica and Mica Mines.

Applications.—Fifty-one applications were received during the year and these added to the 58 pending from previous year raised the total number to 109. Of these 76 were disposed of during the year leaving a balance of 33 at its close.

Mines in Government lands (State mines).—There were 53 mining leases in force at the beginning of the year of which four were relinquished and five cancelled during the year. Nine new leases were sanctioned and two time-expired leases were renewed; thus leaving 53 pending at the close of the year, including the nine cancelled mines of M.R.Ry. A. Subba Nayudu, referred to in the previous year's report

Prospecting licenses.—Twenty-seven licenses were in force during the year for varying periods.

Patta land mines (shared mines).—The year opened with 28 agreements in force of which three were relinquished or cancelled during the year. To these two licenses granted during the year were added thus making the number of agreements in force at the close of the year 27. Of these, the Shah and Pallimitta mines of Messrs. Badsha Sahib & Co., the Lakshminarayana of Mr. Lakshminarasa Reddi, the Pattabhirama mines of Y. Audemmah, the Bhuputri mine of Mr. G. Subrahmanyam and the Kubera patta land mine of Chennur gave a steady outturn. The "E and F mine" of Talupur and Palamani mine at Chaganam under the management of the Official Receiver are also reported to have been effectively worked during the year.

Mines in permanently-settled estates (private mines).—There were 21 mines in the zamindari and shrotriem lands yielding 61,348 lbs. of mica valued at Rs. 25,911. The mines of Kalichedu, in the hands of an Austrian firm, stopped work after war was declared. The mine at Oorupalli and the Chukka mine at Jogipalli shrotriem produced the best results.

Illicit mining.—There were no cases of illicit mining during the year.

Outturn and royalty.—The marginally given figures show the rapid fall in yield of mica during the year, a result due to the general trade depression caused by the war and to the fact that many of the mines were in the hands of enemy aliens. Besides mica, 4,833 lbs. of Samarskite was obtained which realised Rs. 45 in royalty fees. The China Clay and Garnet mines were abandoned.

Years.	LB.	OZ.	RS.
1913–14 ...	826,512	2	27,637
1914–15 ...	331,568	3	14,847

Financial results.—The revenue realized was Rs. 19,122 against Rs. 32,940 in the previous year and the expenditure Rs. 6,617 against Rs. 4,953. The increased expenditure is due to the revision of mica establishment.

Labour.—1,488 persons were employed in mining compared to 2,974 in the previous year. Wages were the same as in the previous year. Children were not allowed to work below ground but were employed in dressing mica. The electric installation at Kalichedu and Sankara mines had not started work yet.

Accidents.—None.

Ventilation and lighting in tunnels.—No change.

Inspection by superior officers.—The Inspector of Mines visited 43, Collector 3, the District Forest officer 1, the Revenue Divisional officers 5 and the District Medical and Sanitary Officer 4 mines. As a result of the latter's inspections steps were taken for the improvement of sanitation and supply of drinking water.

Prospects of industry.—As in the previous year only three of the nine cancelled mines belonging to A. Subba Nayudu were worked during the year. Of late some new applications for mining leases have been received and there is some hope of a revival of the industry.

Recommendations of the Forest Committee.

(*a*) *Classification of forests.*

63. The classification of the forests in *Guntūr*, *East Cuddapah*, *Nellore*, *Chingleput* and *Chittoor* was sanctioned during the year. Proposals for classification in *Bellary* and *Anantapur* were sanctioned after the close of the year, and those for *West Cuddapah* were submitted and are awaiting the orders of the Board.

(*b*) *Constitution of forest panchayats.*

64. During the year seven panchayats in *Anantapur*, two in *Nellore*, eight in *Chingleput* and one in *West Cuddapah* were in charge of forests.

The Collectors' reports on the year's management show that in *Anantapur* the management was fairly good in three cases and bad in four. In *Chingleput* the management was fairly good in five cases, very bad in one case, and very good in two cases. The Collector reports that difficulty is experienced in extending the panchayat system owing to the unwillingness of the villagers to undertake the management on terms which provide for forest conservancy. In *Nellore* the management by the Kavali panchayat is reported to have been fairly satisfactory, and that by the Karedu villagers to be very satisfactory.

During the year arrangements were made to establish 21 panchayats in *Chittoor*, six in *West Cuddapah*, three in *Anantapur*, and two in *Chingleput*. The agreements only came into operation at the close of the year.

Mr. E. A. Davis, Personal Assistant to the Forest Commissioner, was on special duty in connection with panchayats during the latter part of the year and toured in *Cuddapah*, *Chittoor* and *Chingleput* districts of the circle.

(c) Opening of fuel coupes for rural supply.

65. Under the contract system coupes are being opened wherever there is a local demand sufficient to induce a contractor to undertake the felling. Every encouragement is given to contractors and the prices paid by them to the department are often little more than nominal. The result has been a wide extension of supply centres and the forest has benefitted by being cut back and properly coppiced.

(d) The patrol system.

66. This system cannot be widely introduced until the protective establishment is reorganized. In the meantime it is being experimented with on a small scale in several districts and experience is being gained. In *Cuddapah*, it is found that if patrols be substituted for the local and resident protective staff, the result is a failure. The patrols are only useful if they work in connection with a resident staff which can supply them with sufficient local information to act on. Otherwise the patrol's movements are too well observed for their inspection to be effective. In *Chittoor*, it was found that a patrol was only useful provided it was under the control of an active and intelligent Deputy Ranger, and at present it is not easy to provide such leaders.

(e) Inducement to villagers to aid in forest conservancy.

67. Nothing new of any practical importance has been done in the circle during the year. The whole matter has however been the subject of constant discussion and the results will appear when the district grazing schemes are formulated. In *Bellary* and *Nellore* certain reserves were closed to grazing in 1914–15 on account of wilful incendiarism; and in a few cases in *Bellary*, *Cuddapah* and *Chittoor* the grazing fees have been raised for 1915–16 or the burnt areas have been ordered to be closed to grazing for the same reason.

(f) Improvement of water-supply and grazing facilities in Government grazing grounds (Board's Proceedings, Forest No. 125, dated 29th June 1914).

68. In *Anantapur*, *East Cuddapah*, *Nellore* and *Chittoor*, the existing wells and ponds were repaired or deepened. A step-well was constructed in *Anantapur*. In *Guntūr* the graziers were allowed to repair the existing kuntas for the benefit of their cattle. The subject is not reported on in *West Cuddapah* and nothing was done in this direction in *Bellary* and *Chingleput*. More progress may be expected now that the reserves have been definitely classified.

(g) Sale of plantations.

69. The casuarina plantations on the coast are being gradually disposed of by sale. About 500 acres were sold during the year under report.

MADRAS
16*th September* 1915.

S. COX,
Ag. Conservator of Forests, Central Circle.

INDEX.

FOREST ADMINISTRATION REPORT,

MADRAS PRESIDENCY,

SOUTHERN CIRCLE, 1914–1915.

Chapter.	Subject.	Paras.
I	Constitution of State forests—	
	1. Alteration in area	1
	2. Forest settlement	2
	3. Demarcation	3
	4. Forest surveys	4 to 6
II	Management of State forests—	
	1. Regulation of management—	
	(*a*) Preparation and control of regular working-plans ...	7 & 8
	(*b*) Annual plan of operations	9
	2. Communications and buildings—	
	(*a*) Roads and bridges	10
	(*b*) Buildings	11
	(*c*) Miscellaneous works	12
	3. Protection of forests—	
	(*a*) General protection	13 to 15
	(*b*) Protection from fire	16 to 18
	(*c*) Protection from cattle	19
	(*d*) Protection against injuries from natural causes ...	20
	4 Sylviculture—	
	(*a*) Natural reproduction	21
	(*b*) Artificial reproduction	22 & 23
	(*c*) Operations for improvement of growing stock ...	24
	(*d*) Experiments	25
	5. Exploitation—	
	(*a*) System of management—	
	(i) Major forest produce	26 to 29
	(ii) Minor forest produce	30 to 33
	(*b*) Agency of exploitation—	
	(i) Departmental agency	34
	(ii) Purchasers	35
	(iii) Rights and privileges	36
	(iv) Free grants	37
	(*c*) Outturn and sources of forest produce	38
III	Financial results	39
IV	Administration	40 to 54
V	General	55 to 76
	Appendices A and B and Forms Nos. 65 to 85 except 68 and 84.	

FOREST ADMINISTRATION REPORT OF THE SOUTHERN CIRCLE

FOR THE

FOREST YEAR ENDING 30TH JUNE 1915.

CHAPTER I.—CONSTITUTION OF STATE FORESTS.

Introductory.

The principal work of the year in this Circle was the classification of Reserves and the preparation of working plans for the important sandal areas.

1. Alteration in Area.

Reserved forests.—The chief feature of the year was the disafforestation of 1,046 acres (river-side plantations) in *North Vellore* and of 972 acres of casuarina plantations in *South Arcot.* The former are being reafforested. In *Madura* an area of 1,914 acres was deducted on account of the recomputation of areas of the reserves investigated by the Special Deputy Collector.

Reserved lands.—Ariyur Shola Block (1,159 acres) in *Trichinopoly* became reserved land.

The total area of the reserved forests and reserved lands as it stood at the close of the year was 4,426 square miles against 4,430 in the previous year. The transfer of control over the Cauvery and Coleroon padugais to the Public Works Department was ordered at the close of the year.

2. Forest Settlement.

2. Settlement is virtually complete except in *North* and *South Salem* in which districts 64 square miles are still under settlement. In *South Salem* it is possible that there may be further additions.

The field work of the Hudaidurgam Block was completed and the whole settlement should be finished shortly.

The settlement of Aranha and Thirtagiri reserves is complete but the result of appeals is awaited. That of Jarugumalai has not yet been taken up.

3. Demarcation.

3. Final demarcation was carried out in *North Salem* and *Madura* over a length of 7 and 48 miles, respectively. Rectification of demarcation of reserve boundaries was carried out in *North Vellore*, *South Arcot*, *North Salem* and *Tinnevelly*. Demarcation in *North Salem* has been found to be very incorrect and a Ranger has since been posted on special duty to complete the checking of boundaries. In *South Salem* 239 miles were cleared and lockspitted at a cost of Rs. 989. A sum of Rs. 1,840 was spent on repairing previously existing boundaries. In the whole Circle, 189 miles of line were repaired and 7,189 miles were cleared and maintained. One hundred and eighty-nine miles remained to be demarcated at the close of the year of which 178 miles are in *Madura*. The Special Deputy Collector appointed to re-investigate the settlement of certain reserves on the Palni Hills completed his work on the 6th February 1915. He prepared revised notifications for Poombarai-Vilpatty Valley and Kudriyar reserves and verified the correctness of the existing notification in respect of Manjampatty reserve.

4. Forest Surveys.

(a) By the Survey of India Party.

4. During the year, five reserved forests (42,000 acres) in *South Vellore* were surveyed on the 2 inches = 1 mile scale by the Survey of India Party.

(b) By Departmental Survey.

5. All coupes were surveyed by the ordinary staff, except in *North Salem* where a surveyor was employed in Salem West Range, and in *Madura* where similar work was done by a supervisor.

A variety of survey work such as the determining of village boundaries in panchayat areas, verification of reserve boundaries and the surveying and aligning of roads and bridle-paths was done by departmental surveyors.

The Kodaikānal pine plantations were surveyed by two supervisors.

(c) Maps.

6. *Reference maps referred to in section 80 of the Forest Code.*—These are reported to have been maintained in all districts.

CHAPTER II.—MANAGEMENT OF STATE FORESTS.

1. Regulation of Management.

(a) Preparation and Control of Regular Working-plans.

7. *Preparation.*—Considerable progress has been made with the preparation of working-plans during the year, but the classification of reserves, and developments which have taken place have necessitated the revision of many existing plans.

In the *South Salem Division* the Board has sanctioned the sandal working-plan of the Chitteris and this has been supplemented by a plan dealing with the extraction of bamboos, the regulation of grazing and concessions to the Malayalees. This plan was submitted for sanction after the close of the year. The total area covered by these two plans is 70 square miles.

In *South Vellore*, the Working-Plans Officer prepared an elaborate plan to cover the sandal working of the whole of the Javadies (176 square miles). This plan entailed the complete enumeration of all sandal trees in this valuable forest. It was sanctioned after the close of the forest year.

In *North Salem.*—The reconnaissance report for the sandal forest of the division has been approved and the detailed enumeration of the stock in Denkanikotta Range is well advanced. The revision of the Dharmapuri working-plan has also been taken up.

In *Madura.*—The reconnaissance report for the fuel areas of the district has been approved. The stock maps are approaching completion and complete details are nearly ready. This work is being done by the Special Working-Plans Officer.

A working-plan was prepared by the District Forest Officer for the Kodaikānal pine plantations but was not sanctioned.

In *Trichinopoly.*—The sandal areas of the Kollimalais and Pachamalais have been mapped and statistics are being collected.

The work still to be done in preparing and revising working-plans in this Circle is enormous and the Conservator's tours in *North* and *South Salem* and *South Vellore* have shown that very few of the working-plans which are in existence are suitable at the present time.

In *Tinnevelly.*—On the whole the old plans have worked well for a long series of years but here revision and extension of the areas dealt with is required.

8. *Control.*—Very little control has been kept over working-plans and the control registers are not well maintained

The following deviations are some of the more pronounced :—

North Vellore.—Out of 48 fuel coupes prescribed for exploitation during the year only 17 were leased out. Out of the 296 arrear coupes, only 15 were actually worked. This failure in working is said to be due to difficulty in transport and the inaccessibility of several coupes.

South Vellore.—Timber coupes were not worked on account of the unsuitability of the prescriptions of working-plans. Forty-eight current fuel coupes and 345 arrear coupes were not worked during the year owing to their inaccessibility. After completion of classification the revision of these working-plans will be taken up.

South Arcot.—Working of several coupes in Kallakurichi Range fell into arrears for want of demand.

North Salem.—In Maharajagadai, Neralakotta and Lokur Working Circles, working has been in arrears since the Madras Railway substituted coal for fuel. Faulty demarcation, delay in marking standards in areas overgrown with prickly pear and thorny creepers, and unwieldy coupes have been the causes of failure in carrying out the prescriptions of the Vanavasi and the two Shevaroys Working-plans.

South Salem.—Out of 31 working circles, work was carried out in only 23. Of these only ten coupes were completely felled. The failure here is due to the same causes as in North Salem.

Trichinopoly.—There were heavy arrears in Kulittalai and Vaiyampatti ranges at the end of the year. These ranges are accessible to good markets in Trichinopoly and Madura, but the demand has undoubtedly been affected by the war. In the Namakkal and Musiri ranges, work is very heavily in arrears and it is doubtful if these somewhat degraded areas, which are far from a market, are really capable of being worked.

Madura.—The war has affected the demand in this District also and even in the Kanavoipatti and Palamedu ranges there are considerable arrears. Arrear coupes to the extent of 1,579 acres were worked during the year.

Tinnevelly.—In this District, there are no substantial deviations but the Kopparai and Padarmalai working plans have run out, the former after a 10 years period of working and the latter after 20 years' work.

(*b*) *Annual Plan of Operations.*

9. Besides the deviations mentioned in paragraph 8 *supra*, the other important deviations were:—*North Vellore.*—Construction of a road from the 7th mile of Vellore-Kaniambady road to Palamady reserve coupe was not undertaken and repairs to certain roads were not carried out on account of estimates having been received late from the Rangers. *South Vellore.*—Patrakad rest-house could not be completed on account of the illness of men engaged in the construction. *South Arcot.*—Buildings proposed to be constructed in Cuddalore and Kallakurichi ranges were not undertaken. *North Salem.*—The construction of the rest-house and out-houses at Anaibiddahalla was not taken up for want of a suitable contractor. *South Salem.*—The construction of three roads and one building was postponed as more important and urgent works had to be undertaken. *Madura.*—The construction of certain roads and buildings was purposely postponed as it was considered advisable to restrict expenditure as far as possible owing to the unsatisfactory financial position of this District.

2. Communications and Buildings.

(*a*) *Roads and Bridges.*

10. The total expenditure on new works amounted to Rs. 6,233 and on repairs to Rs. 23,680 as compared with Rs. 16,663 and Rs. 24,457, respectively in the previous year. In *North Vellore*, the construction of the Odugathur-Melarasampet road commenced in 1913-14 was completed during the year at a cost of Rs. 1,123. In *South Vellore*, 2 miles of road from Komatiyur to Patrakad were approaching completion. Thirty-five miles of existing roads were maintained at a cost of Rs. 3,518. In South Arcot, the bridle-paths in Siruvady and Muttakadu reserved forests were extended by $2\frac{1}{2}$ miles and a cart-track to a distance of six furlongs opened out to connect the Thurinjikadu rest-house with Villipuram Local Fund Road. In *North Salem*, Billigundlu-Hogainkal road was completed and Bommiyampatti-Lokur road and the approach road to Sholapadi rest-house were commenced. One hundred and twenty four miles of existing roads were repaired In *South Salem*, roads from Panamarathupatti to Malayalapatti, Biyarnatham to Pulikuttiramankoil, Chinnakuppam to Karkanpatti and Namagiripet to Varagur were constructed. In *Trichinopoly*, 124

miles of existing roads were repaired at a cost of Rs. 3,316, of which Rs. 768 spent on the maintenance of three Local Fund roads was recoverable from the Local Board and a sum of Rs. 524 was actually recovered during the year. In *Madura*, 145 miles of existing roads were maintained at a cost of Rs. 8,258. In addition to these 16 Local Fund roads were maintained from funds provided by the District and Taluk Boards and the Kodaikānal Municipality. In *Tinnevelly*, 93 miles of existing roads were maintained at a cost of Rs. 2,353.

(*b*) *Buildings.*

11. During the year, the total expenditure on new buildings and on repairs amounted to Rs. 32,477 and Rs. 11,100, respectively, against Rs. 42,852 and Rs. 13,591 in the previous year. The important new works were:—*North Vellore.*—The completion of the Range office and subordinates' quarters at Odugathur and construction of compound walls to the Satghur and Arungaldrug bungalows. *South Vellore.*—Completion of subordinates quarters at Pudupalayam, part construction of Patrakad rest-house and out-houses. *South Arcot.*—Completion of the rest-house and out-houses at Thurinjikadu and part construction of rest-house in Pavunjipattu reserve. *North Salem.*—Completion of Ranger's quarters at Mecheri and Range office and Ranger's quarters at Anchetti. The rest-house at Hogainkal was completed and out-houses were added to the Sholapadi rest-house. Range quarters at Kadiampatti and a Range office at Mecheri were also taken up but not completed. *South Salem.*—The rest-house at Pappireddipatti and outhouses at Kombutukki and Kambalai were completed. Range offices at Harur and Attur, the rest-house at Cauveri peak, out-houses at Pappireddipatti and subordinates' quarters at Achankuttaipatti were taken up but not completed. *Trichinopoly.*—Construction of Range office at Turaiyur and subordinates' quarters and out-houses and stables at Sobanapuram and improvement to Sobanapuram bungalow. *Madura.*—The completion of a kitchen and stables to the rest-house at Munur and part construction of Vannathiparai rest-house and subordinates' lines at Guruvanuthu. *Tinnevelly.*—Completion of subordinates' quarters at Mundanthurai and Khansapuram, part construction of quarters at Puliangudi, Kodamadi and Pachiammankoil. Buildings for a Forest College camp at Mundanthurai were begun in July and stopped in August.

(*c*) *Miscellaneous Works.*

12. The construction of compound walls at Anchetti and Kadiampatti in *North Salem* was carried out. An elephant trench round Vannathiparai rest-house in *Madura* was dug. *In Tinnevelly*, Rs. 437 was spent on trial borings for the construction of wells for subordinates' quarters.

Thirteen new wells were sunk and 20 old wells were deepened or repaired in the several districts of the Circle during the year.

3 Protection of Forests.

(*a*) *General Protection.*

13. The following statement gives the number of offences of the year compared with the previous year:—

Class.	Injury to "Forests" by fire.		Unauthorised felling or appropriation of wood and minor forest produce.		Grazing without permission or in the tracts in which grazing is prohibited.		Other offences.		Total cases.	
	1913–14.	1914–15.	1913–14.	914–15.	1913–14.	1914–15.	1913–14.	19'4–15.	1913–14.	1914–15.
	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
Cases taken to Court ..	10	6	1,868	1,936	682	778	159	130	2,719	2,850
Cases compounded ..	5	..	7,197	7,919	2,747	2,597	358	518	10,307	11,029
Cases undetected	308	243	189	236	9	16	11	37	517	532
Total ..	323	249	9,254	10,091	3,438	3,391	528	680	13,543	14,411

The total number of offences reported during the year exceeded that of the previous year by 868. The increase was chiefly under the head of unauthorised felling. The increase in cases in *South Vellore* is peculiarly noticeable. The total number in reserved forests rose from 1,036 to 1,592. The increase is chiefly under the head of unauthorised felling but there is also a considerable increase in grazing cases. The increase is in all Ranges. *South Arcot* has still an unenviable superiority as regards the number of cases reported there being no less than 1,969 in the reserves alone which is 106 more than in last year.

Both these districts will probably be considerably affected, when classification has been completed and the reserves are put under panchayat management.

In *Trichinopoly*, there is a very marked increase of cases of unauthorised felling in the unreserves.

Cases brought to trial.

Year.	Convictions.	Acquittals.	Percentage of failure.
	No.	No.	
1913–14	2,690	166	5·81
1914–15	2,712	158	5·50

Cases compounded.

Year.	Number of cases.	Amount.
		Rs.
1913–14	9,391	86,658
1914–15	9,657	84,782

In fixing the amount of compensation attention was generally paid to the orders contained in Government Order No. 1990, dated 13th June 1910.

14. Punishments inflicted by magistrates are reported to be satisfactory except in *North Vellore* and *Madura*. The number of cases in this Circle is far larger than in any other and a very noticeable fact is the very large percentage which are compounded. This, coupled with the fact that only one sandal case and three fire cases have been thought worthy of mention, seems to show that the bulk of cases are of a comparatively trivial character. On the other hand, it is to be noted that forest cases seem to be provocative of graver crime, for in *Tinnevelly* one guard, in *North Vellore* one guard and *South Vellore* one guard and one watcher were murdered. In addition there was one case in *North Salem* and two cases in *Trichinopoly* in which forest subordinates were assaulted. In all these cases, which ended in conviction, the subordinates were merely doing their duty. The placing of isolated reserves under panchayats will undoubtedly result in reduction of offences, but at the same time it is essential that establishments must be increased to protect the forests left in the hands of the department so that the *prevention* of petty cases may be secured.

15. Rewards to the value of Rs. 55 were given to subordinates in *South Vellore* for the detection of three cases. Rewards were sanctioned in two cases in *North Salem*.

(*b*) *Protection from Fire.*

16. *Special Protection.*—There was no change in the system of protection during the year. The area attempted to be protected was 1,023 square miles against 1,212 square miles in the previous year. There has been no actual reduction of the area attempted but 113 square miles in *North Vellore*, 55 square miles in *Madura* and 20 square miles in *South Vellore* were wrongly classed hitherto under Special instead of General protection.

In *South Arcot*, there is practically no fire, a fact which may be attributed to the very heavy grazing incidence and the same refers to *Trichinopoly*. *South Vellore* also shows wonderful results 99·7 per cent. being successfully protected. Here as in *North Vellore*, and *South Salem* the success is undoubtedly due to the co-operation of the Malayalees. The two districts which show up worst in the matter of protection are *Tinnevelly* and *North Salem*. The former is especially bad and this is probably due to the very thick lemon grass which prevails.

The area burnt during the year was 18·31 square miles against 24·56 square miles in the previous year. The percentage of area successfully protected during the year was 98·2 per cent. against 97·97 per cent. in the previous year. The cost per square mile of successfully protected area rose from Rs. 16–4–1 to Rs. 18–15–4.

17. *General protection* was attempted over 3,137 square miles against 2,962 square miles in the previous year. The increase has been explained above. The percentage of failure fell from 1·04 per cent. to 0·4 per cent. during the year.

18. The number and origin of fires are given in Appendix A. There were 258 fires burning 20,715 acres against 320 fires burning 35,478 acres in the previous year. This is a very good result seeing that there are 2,662,781 acres of forest in the circle. In the one case of malicious firing detected in *North Salem*, the accused was convicted and sentenced to three weeks' rigorous imprisonment. The one case of wanton incendiarism in *Trichinopoly* was also successfully prosecuted.

In *Tinnevelly*, out of 15 cases of intentional firing only one case was detected and it was in connection with this case that the forest guard was murdered. The old system of closing a block immediately it was fired is out of vogue and the long delay which is caused by fruitless enquiry followed by a nominal penalty seems to be of little use.

(*c*) *Protection from cattle.*

19. Eighty-three per cent. of the total area of reserved forest was opened to grazing of cattle but closed against goats. Goats were excluded from all the reserved forests from the commencement of the year.

The large area open to grazing is undoubtedly the cause of much of the offence which takes place and the forests have very little chance of improvement.

The incidence of grazing in the several districts of the circle is given below :—

District.	Number of cattle in cow units.	Area in acres.	Number of acres per cow unit.
North Vellore	1,26,687	2,79,680	2·21
South Do.	1,65,310	4,23,040	2·56
South Arcot	1,57,322	1,93,280	1·23
North Salem	1,34.084	4,71,040	3·51
South Salem	1,09,342	3,41,120	3·12
Trichinopoly	1,47,295	2,04,800	1·39
Madura	86,416	3,10,320	4·17
Tinnevelly	35,193	1,30,560	3·71
Total ..	961,649	2,403,840	2·5

These figures are sufficiently startling seeing that extensive areas are included over which no grazing is possible.

The forests of *South Arcot* and *Trichinopoly* and those of *North* and *South Vellore*, where the grazing incidence is heaviest, will undoubtedly cease to exist if this policy is persisted in.

(*d*) *Protection against injuries from natural causes.*

20. (1) *Prickly-pear.*—The prevalance of prickly-pear in this Circle is most noticeable. It covers large areas in *North Vellore*, *South Arcot*, *North* and *South Salem*, *Trichinopoly* and *Madura* and yet no steps are being taken for its eradication nor is it thought worthy of mention in the District reports.

(2) *Lantana.*—Lantana is very abundant in *North Salem* but no steps for eradication have been taken.

In *Tinnevelly*, it is less abundant and 100 acres in Ambasamudram have been cleared at a cost of Rs. 141. In Kuttalam, the work was neglected. It has recently spread to the Srivilliputtur range.

(3) " *Spike* " *disease.*—*North Salem.*—The cutting of infected trees in Jowlagiri did not prevent the spread of the disease and the area adjoining has now been attacked and infected trees are being removed. Two more attacks have been located in the same reserve.

The Thalli reserve also has been infected. In Tholuvabetta, 25 miles from Jowlagiri, two trees were found infected by undoubted "Spike." The District Forest Officer believes the disease to be caused by Fungi probably heteroecious.

Trichinopoly —A considerable areain the Kollimalais, over 100 miles from any known spiked area, has been affected. This appears to indicate that the attack is endemic. Recent enquiries show that the disease has been in existence for over two years but has not been reported. Precautions are being taken to remove all spiked trees as well as a band of healthy trees round the infected area.

Tinnevelly.—Signs of "Spike" are said to have been found at Kuttalam but the observation is not yet confirmed.

(4) *Damage by sambhur*.—This was noticed especially near Mundanthurai in *Tinnevelly* where sambhur are very numerous, but recently the sambhur themselves have been dying in large numbers from a foot affection which causes emaciation.

4. Sylviculture.

(*a*) *Natural Reproduction.*

21. Natural reproduction from seed appears to be satisfactory wherever cattle are excluded from the reserves. On the Javadis of *South Vellore*, the reproduction of sandal is good and it has been ascertained that germination started in August. Throughout the known sandal tracts sandal appears to increase rapidly. It has now been found on the slopes of the Sirumalais in *Madura*.

Both in the Chitteris of *North Salem* and Javadis of *South Vellore* the seedling reproduction of teak, *Pterocarpus Marsupium*, *Shorea Talura* and other timber trees is distinctly good.

In *Tinnevelly*, the *Hopea*, *Balanocarpus*, *Vitex*, *Filicium* and *Dichopsis* produce seedlings in profusion.

Coppice reproduction is good throughout the Circle but far better in *Tinnevelly* than elsewhere. In the drier districts *Albizzia Amara* coppices rather too freely, the number of shoots detracting from their size. In these districts, *Acacia Sundra*, *Chloroxylon Swietenia*, *Anogeissus latifolia* and *Cassia fistula* are particularly good coppicers.

(*b*) *Artificial Reproduction.*

22. *Regular plantations—North Vellore*.—Sixteen acres of teak, rosewood, acha, red-sanders, mahogany and casuarina were planted in Amerdi plantation at a cost of Rs. 892 during the year. The plantations are doing well. *North Salem*.—In the Sannyasimalai plantation, about 12,480 pits were dug and planted. About three-fourths of the plants are reported to be thriving. These small plantations without any definite object are to be deprecated.

In the Pine plantations of *Madura* 50 acres of new planting were carried out and casualities were replaced over 510 acres but further planting will be stopped after putting in the seedlings already raised in the nurseries.

In *Tinnevelly*, the Kani Taungya plantation was continued on a small scale. About 20 acres have now been planted.

Twenty-four thousand palmyra nuts were put down in the Teri sand dunes. The working plan has run out, but will be revised shortly.

23. *Cultural operations—North Vellore*.—The operations were restricted in accordance with the policy enunciated by Mr. Beadon-Bryant. The planting in the Panamadangi reserve was as usual successful and is being extended gradually. *South Vellore*.—Redsanders seed was sown at Thaniar and Kottur but has not been a success. *South Arcot*.—Seeds of miscellaneous species were sown over an area of 1,123 acres with poor results. *North Salem*.—The result of sandalwood sowing in the Nagaramalai plantation has on the whole been a failure except in about one-fifth of the locality where the seedlings have established themselves and are doing well. *South Salem*.—Dibbling in seeds in blanks in felled coupes and planting cuttings and sowing seeds in pits in specially protected areas were continued as usual. A large quantity of sandal seed was also sown in the Upper slopes of the Shevaroys and the

result is not satisfactory owing to the failure of timely rain. Sandal seeds were also sown in selected places at an altitude of 2,000 to 2,500 feet on the Peria-Kalroyans, Pachamalais and Kollimalais and the result is reported to be partly successful. Seeds of timber and fuel species dibbled in the coupes felled in the previous year in the Attur Range were also fairly successful. *Tinnevelly.*—Seeds of the principal species were sown broad cast in felled coupes and the result was poor everywhere except in Srīvilliputtūr Range. One thousand palmyra nuts were sown in Virusampatti working circle and 65 per cent. have struck.

(*c*) *Operations for improvement of growing stock.*

24. In all Districts creepers and climbers affecting standards in all the felled coupes were as usual cut and removed by subordinates. The fencing of felled coupes is also usually insisted on except in *Tinnevelly* where it is unnecessary. The cutting of creepers damaging sandal has been much neglected in the past but is now being undertaken on the Chitteris and Javadis in accordance with the working plan.

The District Forest Officer, *Trichinopoly*, has recently pointed out the need for this operation in the Kollimalais.

(*d*) *Experiments.*

25. *Dalbergia Sissoo.—North Vellore.*—This species introduced in Amerdi plantation has given astonishing results. It has been introduced in Pichanur tope, Pinnathorai, Odugathur and Arasampet.

Hardwickia binata—North Vellore.—This species is thriving well in Amerdi plantation. *Tinnevelly* —four pounds of seed got from Coimbatore were sown but there was no germination.

Pterocarpus santalinus. Redsanders.—*North Vellore.*—This species is doing well in Amerdi plantation. *South Arcot.*—2,160 Redsanders in Salavadi and 50 in Peradikuppam reserves from 1 to 10 in height are reported to be doing well. *Tinnevelly.*—Seeds of Redsanders were sown in Rangarthirtham working circle. Forty seedlings survive and the rest were unfortunately burnt but are shooting again.

Swietenia Mahogani and Macrophylla.—Desultory experiments are being continued on a small scale but are devoid of interest in this circle.

5. Exploitation.

(*a*). *System of Management.*

(i) Major Forest Produce.

26. The total area of forests under working-plans is 2,782 square miles. The various sylvicultural systems in force over this are shown in the following table :—

Clear fellings	1	.04
Simple coppice	183	6·58
Selection fellings	183	6·58
Coppice with standards	1,171	42·09
Improvement fellings	431	15·49
Pastoral method	42	1·51
Forest for which working-plans have been prepared but not subjected to any definite working	771	27·71
	2,782	100·00

(1) *Clear or Regeneration fellings* and

(2) *Selection Fellings.*

27. *Clear or regeneration fellings.*—Five coupes of 305 acres of casuarina in *South Arcot* and 2 coupes of 46 acres of casuarina in Tanjore were clear felled.

Selection fellings.—The area shown under this head is misleading as Bamboo and Sandal working form the principal items. Only three coupes are worked under regular selection fellings.

(3) & (4) *Improvement* and *Coppice fellings.*

28. *Improvement fellings.*—Six coupes of 614 acres in *North Vellore* and 1 timber coupe of 298 acres in *South Vellore* and a few timber coupes in *South Salem* were worked under Improvement fellings.

Coppice with standards.—The following coupes were felled under coppice with standards : 25 fuel coupes of 1,771 acres in *North Vellore*, 40 coupes of 2,497 acres *in South Vellore*, 53 coupes of 4,704 acres in *South Arcot*, 7 coupes of 1,563 acres in *North Salem*, 28 coupes of 2,740 acres in *South Salem*, 77 coupes of 3,460 acres in *Trichinopoly*, 34 coupes of 3,534 acres in *Madura*, 15 coupes of 1,337 acres in *Tinnevelly*.

Coppice without standards.—One coupe of 13 acres and 5 coupes of 189 acres were worked in *North Vellore* and *Tinnevelly* respectively.

(5) *Unregulated fellings.*

29. In *North* and *South Vellore*, *South Arcot* and *South Salem* unregulated fellings under the permit system were confined to unreserves. In the reserves of Kodaikanal and Palni Ranges of *Madura* selected and marked timber trees were sold for domestic requirements on payment of seigniorage fees.

(ii) Minor Forest Produce.

(1) *Miscellaneous Produce.*

30. Minor forest produce was as usual leased out. Permits were issued for manure leaves in *North* and *South Vellore*, *South Arcot*, *Trichinopoly* and *Tinnevelly*. In *Trichinopoly*, 296 maunds of Divi Divi pods were collected departmentally but could not be sold. Small quantities of cardamoms, dammer, mace and the sambhur horns were collected by the Kanis of *Tinnevelly* at a cost of Rs. 60 and realised Rs. 91½.

(2) *Extraction of fodder.*

31. Free removal of grass was allowed in *North* and *South Vellore* and *South Arcot.*

In *North Salem*, the grass in three closed coupes was sold for Rs. 86.

In *Madura*, removal of grass was allowed on permits.

In *Tinnevelly*, the Nanal and Korai grasses are much valued and are included in the minor Forest produce contract.

(3) *Hay-making.*

32. The Banavaram reserve in *North Vellore* was leased out to the Military department on payment of royalty of Rs. 2 per ton of hay removed and a sum of Rs. 303 was realised during the year against Rs. 98 in the previous year.

(4) *Grazing.*

33. The revenue derived from grazing was Rs. 1,92,251 against Rs. 2,05,053 in the previous year, a decrease of Rs. 12,802 or 6·2 per cent. The decrease was due chiefly to the closure of reserves against goat browsing in *North Vellore*, *North Salem* and *Madura.*

(*b*) *Agency of exploitation.*

(i) Departmental Agency.

34. The work done by departmental agency is now very trifling and represents barely 2 per cent. of the total outturn.

(ii) By Purchasers.

35. *Timber.*—44,005 cubic feet. Due to fall in the collection of tree value from lands assigned on darkhast in *Madura* and *Tinnevelly* and also to the non-sale of timber coupes in *Madura.*

Fuel.—18,02,141 cubic feet. The decrease was due to a less number of coupes being sold in *North Vellore*, *North Salem*, *Trichinopoly* and *Madura*. In *Madura* and *Tinnevelly*, trees on tank beds were only sold to a limited extent. There was also decrease in the sale-proceeds of dead trees in the unreserves disposed of by the Revenue Department in *South Vellore* and *South Salem*.

Bamboos.—Rs. 11,125. Due to comparatively poor yield from coupes leased out in *North Vellore*, to certain bamboo contractors in *North Salem* not having paid the instalments in time and to the major portion of sale amounts of 1914-15 coupes having been credited in the latter part of the previous year in *Trichinopoly*.

Grazing and minor produce.—Rs. 46,878. Due to the stoppage of trade in barks on account of war, to the closure of reserves to goat browsing in *North Vellore*, *North Salem* and *Madura*. Minor forest produce leases in *Trichinopoly* and *Tinnevelly* realised less than usual and there was a decrease in the sale of manure leaf permits in *South Salem* and *Trichinopoly* owing to increase of the seigniorage fee.

(iii) Rights and Privileges.

36. The privileges allowed were as usual for grazing at reduced rates in *North* and *South Vellore* and removal of thatch grass to the value of Rs. 383 in *South Arcot*. Tapping of patta palmyras in reserves was allowed in *Tinnevelly*, the rent being Rs. 1,722 against Rs. 2,339 in the previous year.

(iv) Free Grants.

37. The estimated value of free grants was Rs. 13,568 aginst Rs. 9,425 in the previous year. The increase was due chiefly to a larger supply of Korambu materials to the Public Works Department in *Trichinopoly* and to the large grants of timber made by the Revenue Divisional Officer, Tiruvannāmalai, for reconstructing burnt houses, but it was partly counterbalanced by a small decrease in the free removal of grass in *North Vellore*.

The quantity and estimated value of produce removed by right holders and free grantees are shown in the following abstract :—

	Timber.		Fuel.		Bamboos.	Grass and grazing.	Other minor-produce.	Total value.
	Cubic feet.	Value.	Cubic feet.	Value.	Value.	Value.	Value.	
		Rs.		Rs.	Rs.	Rs.	Rs.	
Right holders	..	..	..	..	..	..	2,105	2,105
Free grantees	90,493	7,744	3,984	254	308	3,337	1,930	13,568
Grants at reduced rates ..	..	..	..	..	..	1.928	..	1,928
Total ..	90,493	7 744	3,984	254	308	5,265	4,035	17,601

(c) *Outturn and Sources of Forest Produce.*

38. The total outturn is given in the following statement.

Agency of exploitation.	Timber including sandalwood in cubic feet.		Fuel in cubic feet.		Bamboos-value.		Minor produce including grass and grazing.value.	
	1913-14.	1914-15.	1913-14.	1914-15.	1913-14.	1914-15.	1913-14.	1914-15.
					Rs.	Rs.	Rs.	Rs.
By Government agency ..	21,605	19,338	64,207	62,294	277	201	706	531
By purchasers	964,871	920,866	6,579,693	4,777,552	1,12,914	1,01,789	4,29,093	3,82,215
By right holders	..	..	..	..	..	..	2,389	2,105
By free grantees	47,810	90,493	26,689	3,984	46	303	3,677	5,267
Total ..	1,034,286	1,030,697	6,670,589	4,843,830	1,13,237	1,02,293	4,35,865	3,90,118

The variations have already been explained. The rates for grazing fees levied in the several districts are shown in Form No. 74. The number of animals licensed on payment was 1,267,224 against 1,282,494 in the previous year.

CHAPTER III.—FINANCIAL RESULTS.

39. The revenue and expenditure of the year are compared with those of the previous year and the average of the preceding quinquennium in the following abstract :—

—	1914-15.	1913-14.	Average of preceding five years.
	Rs.	Rs.	Rs.
Revenue	12,45,251	13,01,343	13,76,476
Expenditure.			
A.—Conservancy and works including refunds	2,38,364	2,79,752	3,93,334
B.—Establishments) .. .	3,84,569	3,77,947	3,52,588
Total Expenditure ..	6,22,933	6,57,699	7,45,922
Surplus ..	6,22,318	6,43,644	6,30,554

Compared with the previous year there was a decrease of Rs. 56,092 under revenue and Rs. 34,766 under expenditure. 49·7 per cent. of the total revenue was derived from major produce, 40·7 per cent. from minor produce and 9·6 per cent. from miscellaneous sources. Of the expenditure 42·4 per cent. was devoted to the upkeep and improvement of the forests, 2 per cent. to exploitation and 55·6 per cent. to miscellaneous items. The proportion of net to gross revenue rose from 49·5 per cent. to 50 per cent. The outstanding revenue at the close of the year was Rs. 2,72,800 of which Rs. 37,837 fell due within the year. The estimated value of timber and other produce at sale depots at the close of the year was Rs. 51,851 against Rs. 78,409 at the commencement of the year showing a decrease of Rs. 26,558.

Receipts.

The chief variations are shown below :—

(i) *By Departmental Agency.*

Sandalwood.—Rs. 20,756 due to bad prices and less quantity sold on account of war.

(ii) *By purchasers.*

Timber — Rs. 9,455—*vide* paragraph 35 *supra.*

Fuel + Rs. 25,905. There would have been a large decrease but for sale of disafforested Casuarina plantations in *South Arcot* and *Tanjore* which realised large sums.

Bamboos — Rs. 8,859
Grazing — Rs. 12,802
Minor produce — Rs. 31,130
} due to reasons explained in paragraph 35 *supra.*

Expenditure.

A. "Conservancy and Works".

The expenditure was less than that of the previous year by Rs. 41,388. The decrease was due chiefly to the cessation of departmental operations, the decrease of commission paid to permit issuing officers owing to reduced collection under II (*d*) and II (*e*), the non-execution of road and building works and to the curtailment of expenditure under planting operations.

B. "*Establishment.*"

The expenditure exceeded that of the previous year by Rs. 6,622. The increase was due mainly to the employment of the Special Working Plans Officer and his establishment throughout the year.

CHAPTER IV.—ADMINISTRATION.

40. *Circle charge.*—Mr. J. S. Battie held charge of the Circle up to 2nd November 1914 and retired from service; Mr. P. M. Lushington assumed charge of the Circle from the same date.

During the year Mr. F. J. Marshall was appointed as Forest Engineer and was posted to the work of roads in the *South Vellore.*

Mr. R. B. Cornwell, Extra Assistant Conservator, was posted to working plans.

The Special Deputy Collector's appointment in *Madura* ceased as the work was finished.

New ranges—South Salem.—The division of Harur North and South Ranges into three Ranges was sanctioned during the year in G.O. No. 3671, Revenue, dated 16th December 1914 and the third Range called Chitteri Range was formed from 8th April 1915. *South Vellore.*—An additional Range, contemplated many years ago, in the Javadis was formed during the year and called Santhavasal. The large and important Range of Tirupattur requires sub-division. *Madura.*—Proposals are under consideration for the formation of a third Range by sub-dividing the existing Palamedu and Kanavoipatti Ranges. *Trichinopoly.*—The reduction of the existing number of Ranges is under consideration.

Establishment.—During the year one Ranger in *South Salem* for the Chitteri Range, five temporary Deputy Rangers for *Working Plans* and three for Sandalwood operations, in *North Salem* were sanctioned. Mr. Cornwell was confirmed as Extra Assistant Conservator and Mr. J. A Aranha, Ranger, second grade, was promoted to Extra Assistant Conservator and posted to the Madras Forest College. The proposals for the reorganisation of subordinate staff, which were under consideration during the year, have since been submitted.

41. *Work of superior officers.*—The work of all District Forest Officers has been favourably reported on by the Collectors of the district. I specially call attention to Mr. H. A. Latham's untiring zeal in dealing with wrong settlement and wrong demarcation. Mr. C. C. Wilson, Working Plans Officer, has been indefatigable and his careful enumeration of sandal trees in the Javadis and North Salem Hills are worthy of the highest commendation. M.R.Ry. Rai Sahib E. C. M. Mascarenhas Avargal has been most successful in his dealings with the Malayalees on the Chitteris of *South Salem.*

42. *Executive staff.*—The work and conduct of the Rangers was good on the whole but there are several men who, in spite of their training, are incapable of dealing with the elementary rules of Sylviculture and the simple prescriptions of working plans.

The best Rangers of this Circle appear to be C. M. Belliappa, K. L. Muniswami Ayyar, E. Dawson, R. E. Lemos and R. Manickam.

One Ranger committed suicide in *South Vellore.* No Rangers were dismissed but one was reduced and one suspended.

The Deputy Rangers were fairly satisfactory as a class.

43. *Protective staff.*—The conduct of the protective staff is reported to be unsatisfactory in all districts except *Madura* and *Tinnevelly.* There were 211 removals or dismissals, 115 suspensions and three reductions in this class.

44. *Ministerial establishment.*—Generally reported to be satisfactory.

45. *Health of establishment.*—Reported to be generally good except in the Pachamalais, Kollimalais and Javadis. One Forester in *South Vellore* and one forest guard in *Trichinopoly* died of Malaria. In *North Vellore*, one guard was murdered while detecting a case of illicit grazing, *in South Vellore*, one forest guard and one watcher

were murdered by the Malayalees of the Inner Javadis while detecting a goat browsing case and in *Tinnevelly*, one forest guard was murdered while detecting a case of intentional firing of reserves.

46. *Relations between Revenue and Forest officers* reported to be cordial throughout the circle.

47. *Service books* were maintained and verified in all districts.

48. *Conservator's inspections.*—The Conservator was on tour for 158 days. All the districts except Trichinopoly and South Arcot were visited and the offices of these districts inspected. Inspection notes were written for Tinnevelly and North Salem.

49. *Touring of District Forest Officers.*—The minimum period of touring required was exceeded in all districts except *Tinnevelly* where the deficiency was slight.

50. *Inspection of Range offices.*—All the Range offices were inspected during the year.

51. *Audit of accounts of District Forest Offices.*—The accounts of all the districts were inspected by the Assistant Inspector of Local Fund Accounts and the result was generally satisfactory.

52. *Imperial Forest College, Dehra Dun.*—One probationer was under training in *Tinnevelly* and deputed to the College during the year. One of the probationers deputed from this Circle has since returned from the College and posted to this Circle.

53. *Madras Forest College, Coimbatore.*—Two Rangers and one Deputy Ranger returned from the College, one Ranger with honours and distinction and the other two with higher standard certificates. Five are under training and five Deputy Rangers have been deputed for 1915-17 course.

54. *Vernacular Training School.*—The continuance of the school was sanctioned in Government Order No. 227, Revenue, dated 25th January 1915, for a further period of three years. Students from *Chingleput* district were deputed to this Circle as the school in Central Circle is Telugu. The remaining candidates were selected from *Trichinopoly* and *Tinnevelly*. Out of 29 students selected, two were sent back on account of ill-health and poor work and of the remaining 27, 12 obtained first class, 10 second class and the remaining five third class certificates. The control and management by the Instructor M. Pakkyanathan is reported to be exceedingly good.

CHAPTER V.—GENERAL.

55. *Realization of Revenue from the usufruct of toddy-yielding trees.*—The revenue realized was 10,279 against Rs. 10,251 in the previous year. The fixed fee system continued to be in force. In *South Salem*, the usufruct of trees not taken up under the fixed fee system was as usual leased and the amount realised was Rs. 3,276 against Rs. 3,162 in the previous year.

56. *Measures adopted to encourage the growth of manure leaf yielding trees and shrubs.*—In *Trichinopoly*, a small quantity of Sesbania Aculeata was sown in one of the padugais and the seed supplied to the Agricultural Department. From *South Salem*, it is reported that a good start has been made this year with Daincha cultivation in Attur taluk. In *South Arcot*, agricultural pamphlets were distributed to leading ryots and the advantages of growing green leaf manure were explained by the Revenue officials; but the ryots were slow in taking advantage of the instructions. In the meanwhile the forests of several districts notably *North* and *South Vellore* are being spoilt by the pernicious practice of issuing licenses for manure leaves.

57. *Grant of cowles for the formation of Casuarina Plantations in sandy areas.*—No applications were received. In *South Arcot*, the disafforested land is being planted by the purchasers with casuarina on an extensive scale.

58. *Cultivation in reserved forests.*—Leases of the previous years were renewed in *South Vellore*, *North and South Salem*, *Trichinopoly* and *Madura*. *In North Salem*, the settlement of the Biligundlu fishermen in 75 acres of Natrapoliem reserved forest has not yet been effected. In *Trichinopoly*, the right of cultivating korai grass in

the Lalapet reserve was leased for five years during the year at Rs. 515 per annum. In *Madura* the question granting leases for lands on which cardamoms or other crops have been established, has not yet been finally settled.

59. *Improvement of water-supply in State forests.*—The scarcity of water in the hill forests of this circle is particularly noticeable in the hills of *North* and *South Salem* and in the Javadis *South Vellore*, but nothing has been done hitherto to improve the water-supply. The bunding of streams has been carried out to a small extent in six reserves in *North Vellore* but the localities do not appear to have been well chosen.

One or two tanks have been repaired but nothing to really improve the water-supply has been effected.

60. *Supply of forest produce to meet the wants of the people.*—The contract system has been in force in all the districts and contractors are usually bound to supply the wants of the people at reasonable rates. It is noticed however that the ryots do not as a rule avail themselves of these opportunities, but supply themselves from patta lands, unreserves, or by pilfering from the reserves. In both *Salem* and *Madura* there has been a decrease in the demand for fuel owing to the war having interfered with the dyeing industry.

61. *Sale of fuel at the edge of forests.*—This is generally done by coupe contractors in *North Vellore*, *Trichinopoly* and *Madura*. The fuel obtained by departmental exploitation in Musiri Range, *Trichinopoly* district, was disposed of at the edge of the forests by public auction.

62. *Arrangements made for the transfer of sale depots to private agency.*—The contract system is now fully established in all the districts of the Circle and contractors have opened depots in all important towns.

63. *Free removal of grass.*—This has been referred to in paragraph 31 *supra*. As usual the concession was largely availed of by the ryots in *North Vellore*. In *South Vellore*, free removal was permitted up to the beginning of the fire season.

64. *Hill tribes.*—The Malayalees of the Chitteris in *South Salem* and in the Chengam and Polur Javadis of *South Vellore* have given the department considerable assistance in protecting the forests from fire and in the protection of sandal and the same is the case in parts of the Kollimalais and Pachamalais of *Trichinopoly*. In the Tirupattur Javadis and in the Kollimalais of *South Salem* shifting cultivation still persists. In the latter district, the hills have been classed as assessed waste by the Settlement officer. On the Tirupattur Hills the matter is being dealt with by the Forest Commissioner.

A guard and watcher were murdered in the Tirupattur Javadis and some of the subordinates were assaulted by Malayalees in the Perumbalur range of *Trichinopoly*. In the Tirupattur-Javadis the Malayalees have been ruthless in their destruction of sandal and the Malayalees living at the foot of the Pachamalais are suspected of smuggling sandal and timber. On the whole considerable progress has been made in our dealings with this class of hillmen, though there is still room for improvement in several directions.

In *Tinnevelly* district, a settlement of Puliyars has been established at Puliyuthu. They were employed on fire line work and as patrols. At Kariar the small settlement of Kanis have raised some successful teak plantations, the plants being raised with the field crops. The area is being extended yearly and the early plantations are now well established.

65. *Prospecting licenses.*—No license was granted during the year.

66. *Timber and sandalwood transit rules.*—The rules continued to work satisfactorily and without friction. In *North Salem*, 409½ maunds of sandalwood seized last year on suspicion were released as it was not proved to be illicit removal. Two small cases of removals in contravention of the rules brought to notice by the Mysore Forest authorities were compounded. From *Trichinopoly*, the property mark of two persons were registered during the year and applications from two other individuals were rejected as they did not comply with the rules.

67. *Rules under sections* 26 *and* 32 *of the Forest Act.*—The rules under section 26 worked satisfactorily. From *North Salem*, it is reported that no attempt was made by the Revenue Officers to protect the classified growth in the unreserved lands and that steps are being taken to remedy the same.

In *Madura*, the Zamindar of Seitur on behalf of Minor Zamindar of Elumalai has applied under section 32 (*a*) of the Forest Act for the management of Elumalai forests by the Government. His application is being considered. In *Tinnevelly* the rules under section 26 were extended to the forest and waste lands in Seitur Zamin and the Ghat slopes and spurs in the Zamin were declared reserved land.

68. *Rules regarding levy of composition fees.*—Attention was paid to the proper working of the rules.

69. *Arrangements made in holding the villagers adjacent to particular forests responsible for protection of those forests by dividing the village and blocks of forests concerned.*—Very little progress has been made in this direction in the plains, but in the hills a working plan has been prepared for the Chitteris which embodies such arrangements. These principles are being extended to the Javadis.

In *South Arcot* as offences of illicit grazing and cutting were very rife in two reserves, a notice of warning was issued to the ryots that they would be closed, if they do not desist from committing offences.

Live and Dead Stock.

70. *Live-stock.*—There is no live-stock in the Circle.

71. *Inventory of valuable stock.*—Stock registers are maintained in all districts and verified at inspections.

72. *Rain-gauges.*—Readings are recorded in all districts. In *Trichinopoly*, two new stations were opened this year in accordance with the prescriptions of the working-plan for Musiri Range. In *Tinnevelly*, a gauge was put up again at Mudaliarathu.

73. *Specimens.*—Timber specimens were sent to Conservator of Forests, Northern Circle, from *North Vellore*, *Madura* and *Tinnevelly*, in connection with the preparation of the vernacular list of trees and shrubs. Specimens of sandalwood have been sent from *Trichinopoly* and *Tinnevelly* to Forest Research Institute, Dehra Dun, for analysis of their oil value. Herbarium specimens were sent from *Tinnevelly* to the Forest Botanist, Dehra Dun.

Suits.

74. *North Vellore.*—A boundary dispute in Gundlapalle reserve between the Zamindar of Satghur Bagayat and the Forest Department is pending inquiry with the Assistant Director of Survey. *South Arcot.*—The civil suit referred to in the last year's report was dismissed with costs, *i.e.*, ended in favour of the subordinates concerned. *Trichinopoly.*—The suit filed by Arunachala Reddi, referred to in the last year's report, was decided in favour of Government and an appeal has been preferred in the High Court.

One Subba Nadan, contractor of Thalanayar coupe VIII, has filed a suit against Government in the District Munsif's Court of Tanjore claiming damage and costs for his not having been allowed certain concessions in the working of the coupe.

A pattadar of Kulitalai has also filed a suit against Government and the contractor Kuppuswami Udayan for damage done to his patta land by the contractor by the working of the fuel coupe leased to him by the Forest Department.

Madura.—One Santhanatham Chetti, contractor for the tank-bed trees, has filed a suit claiming damages to the extent of Rs. 2,820 on the ground that he was not given sufficient time to cut and remove all trees sold to him by the Forest Department.

Tinnevelly.—The result of appeal to the Privy Council in Kuttalam water-fall suit is not yet known.

75. *Forest Committee's report.*—The classification of reserves is complete in the *North Vellore*, *Trichinopoly* and *Tinnevelly* and is approaching completion in all the other districts. In *Madura* the classification is pending with the Board.

Four reserves in *North Salem* and 26 in *South Salem* still await classification but in the latter district some revision is required.

In *South Vellore*, all reserves have been classified except those in the Tiruvannamalai Range, which have been inspected by the District Forest Officer and Conservator since the close of the year.

In *South Arcot*, a few small reserves await inspection by the Conservator, otherwise classification is complete.

Panchayat system.—The formation of panchayats has begun and some progress has been made in *North Vellore* and *South Salem*. In both districts the same mistake has been made of handing over a portion instead of the whole reserve to panchayats. Other difficulties have also arisen in connection with the Forest Committee's suggestions notably in handing over of very small areas to a panchayat. Such difficulties are natural at the outset but are likely to be overcome in course of time. In *Trichinopoly* one reserve has been placed under panchayat management. *Tinnevelly* is disappointing, for an effort was made to obtain panchayats but appears to have failed.

The patrol system.—The system has been introduced in *North Vellore*, and *South Arcot* and *South Salem*, but the present establishment is far too small to say how it is likely to work. It will be more generally introduced when the re-organization is sanctioned.

76. *Forest Conference.*—Three Conferences were held by the Forest Commissioner with the Conservators during the year, two at Madras and one at Coimbatore and various subjects on Forest matters were discussed.

OFFICE OF THE CONSERVATOR OF FORESTS,
SOUTHERN CIRCLE,
TRICHINOPOLY, *6th September* 1915.

P. M. LUSHINGTON,
Conservator of Forests, Southern Circle.

INDEX.

FOREST ADMINISTRATION REPORT,

MADRAS PRESIDENCY,

WESTERN CIRCLE, 1914-1915.

Chapter.	Subject.	Paras.
I	Constitution of State forests—	
	1. Alteration in area	1
	2. Forest settlement	2
	3. Demarcation	3
	4. Forest surveys	4 to 6
II	Management of State forests—	
	1. Regulation of management—	
	(*a*) Preparation and control of regular working-plans ...	7
	(*b*) Preliminary working-plans reports	8
	(*c*) Annual plan of operations	9
	2. Communications and buildings—	
	(*a*) Roads and bridges	10
	(*b*) Buildings	11
	(*c*) Miscellaneous works	12
	3. Protection of forests—	
	(*a*) General protection	13 & 14
	(*b*) Protection from fire	15 to 17
	(*c*) Protection against cattle	18
	(*d*) Protection against injuries from natural causes ...	19
	4. Sylviculture—	
	(*a*) Natural reproduction	20
	(*b*) Artificial reproduction	21
	(*c*) Operations for improvement of the growing stock ...	22
	(*d*) Experiments	23
	5. Exploitation—	
	(*a*) System of management—	24
	(i) Major forest produce	25 to 30
	(ii) Minor forest produce	31 to 35
	(*b*) Agency of exploitation—	
	(i) Departmental agency	36 & 37
	(ii) By Purchasers	38
	(iii) Right-holders and (iv) Free grants	39
	(*c*) Outturn and sources of forest produce	40
III	Financial results	41
IV	Administration	42 to 57
V	General	58 to 69
	Appendices A and B and Forms Nos. 65 to 67 and 69 to 85.	

FOREST ADMINISTRATION REPORT OF THE WESTERN CIRCLE

FOR THE

FOREST YEAR ENDING 30TH JUNE 1915.

CHAPTER I.—CONSTITUTION OF STATE FORESTS.

1. Alteration in Area.

Reserved forests.—The area of reserved forests increased from 4,102 to 4,138 square miles. Thirty-five square miles in *South Malabar* and a total extent of one square mile in *South Canara*, *North Malabar*, *Kollegal*, *North* and *Central Coimbatore* were transferred from reserved lands. Seven small areas aggregating 193 acres were disafforested.

Reserved lands.—Four hundred and sixty-three acres consisting chiefly of enclosures in reserved forests were added and 36 square miles were transferred to reserved forests. The area at the close of the year was 114 square miles, of which 96 are leased forests, and five are toda patta lands.

2. Forest Settlement.

2. Thirty-four blocks (47 square miles) remained to be settled at the commencement of the year, to which ten (·72 square mile) were added during the year. Of these twelve blocks (36 square miles) were transferred to reserved forests, leaving thirty-two blocks (11·86 square miles) at the end of the year. Of the latter, the actual settlement was completed for eight blocks.

3. Demarcation.

3. *New boundaries.*— Fifty-eight miles in *Kollegal* and nine in *Central Coimbatore* were newly demarcated at a cost of Rs. 1,102. *Already existing boundaries*—Two miles in the *Nilgiris* and 37 in *North Coimbatore* were permanently demarcated; the demarcation in the latter district was in accordance with the verification by the Special Officer; 38 miles in the same district were also repaired. The total cost incurred was Rs. 2,856. One hundred and seventeen miles in *South Canara* were stone-lined and lockspitted at a cost of Rs. 1,343; a sum of Rs. 65 was also spent in demarcating preliminarily the boundaries of a sandalwood area proposed for reservation. Five miles in *Kollegal* were stonewalled and lockspitted at a cost of Rs. 148. Fifty-four miles of line in *Central* and *South Coimbatore* were repaired at a cost of Rs. 602. In *North* and *South Malabar*, 162 and 62 miles respectively were as usual cleared for the purpose of fire protection, the cost being debited to that head. The length of boundaries cleared or repaired free of cost by subordinates is reported to be 695 miles. In *South Canara*, the *Nilgiris* and *Kollegal*, the subordinates continued to clear and maintain boundaries as part of their normal work, but no accurate record of the results was kept. The demarcation of the new boundary between the *Nilgiris* and *Central Coimbatore*, the object of which is to transfer the lower half of the Nilgiri slopes to *Central Coimbatore* was started in April last. The work which has been inspected by me is in the hands of an Extra Assistant Conservator on special duty for the purpose, assisted by a Surveyor on Rs. 100+25 (hill allowance). It is of the most arduous and tedious character owing to the climate, the labour difficulty, the precipitous slopes to be traversed and the obliteration of the old survey marks which have to be identified by the Surveyor and are often completely buried under

the wash from the slopes. The first 87 chains was done in 2½ months and together with the pay and allowances (exclusive of travelling allowance) of the officers mentioned has cost Rs. 1,340 or at the rate of Rs. 1,232 per mile. The work is estimated to take about two years. To hasten its completion the District Forest Officer has asked for two more surveyors. The sanction of this work arose out of a scheme for supplying the Nilgiri Railway with fuel from the lower slopes to be transferred to *Central Coimbatore*. The line however almost immediately took to using coal and now I see no advantage in carrying out the transfer—rather the reverse.

4. Forest Surveys.

(*a*) *By the Survey of India Party.*

4. During the year, no surveys were undertaken.

(*b*) *By Departmental Survey.*

5. The survey of timber, fuel and bamboo coupes of the year was carried out departmentally. So were the traces of two bridlepaths in *Kollegal* and *Central Coimbatore*, the alignment of two roads in *Kollegal* and *South Coimbatore* and some miscellaneous items in connection with the fencing of boundaries. The special officer deputed by the Madras Survey Department for the estates on the Anamalais has surveyed 12 square miles and his services will have to be continued for another season. He will resume field work in November 1915.

(*c*) *Maps.*

6. *Reference maps under section* 80 *of the Madras Forest Code.*—These are reported to have been maintained except the range reference maps in *Kollegal* and *South Coimbatore.*

Special District Reference Maps—Preparation.—The Forest Map Officer completed the maps of *Ganjām*, *Kistna* and *Nellore* and prepared those of *Vizagapatam*, *Lower Gōdāvari*, *Guntūr* and *North Malabar*. He has yet to prepare the map of *Upper Gōdāvari* and redraw the maps of *Cuddapah*, *Salem*, *Madura*, *Ramnad* and *Tinnevelly* with reference to the alterations of the boundaries of forest divisions. His services have been extended up to end of March 1916 by which time, it is hoped, that the preparation of these reference maps will be finished. *Progress in publication.*—According to the progress statement furnished by the officer in charge, Forest Map Office, Dehra Dun, which relates to this Circle, the maps of *South Canara* and *North Coimbatore* were published and the map of *South Malabar* will shortly be printed. The *Nilgiri* map which was reported last year to be in the press has not yet appeared.

CHAPTER II.—MANAGEMENT OF STATE FORESTS.

1. Regulation of Management.

(*a*) *Preparation and Control of regular working plans.*

7. *Preparation.*—There was no Working Plans staff in the Circle. The working plan for the eucalyptus plantations in the *Nilgiris* and the subsidiary plans for the manufacture of charcoal in the Newman and Muthinad plantations were sanctioned during the year. The collection of statistics for preparation of a working plan for Gundal bamboo working circle in *Kollegal* continued; the tentative working in Doddahalla valley bamboo working circle was stopped owing to the flowering of the stock. A valuable report on the Tekadi leased forests was prepared by Mr. C. E. C. Fischer, the District Forest Officer. Besides an historical record, it embodies a reconnaissance survey of the forests and suggestions for working which will be of great assistance for the working plan when this is taken up.

Revision.—Statistics for the revision of the working plans for the forests of Coondapur and Sankaranarayana ranges in *South Canara* and of Begur and Chedleth in *North Malabar* have not been completed. The revision of the working plans for the forests of Mettupalayam range and for Tadagam reserved forest has just been completed. Mr. Habibulla Sahib, Extra Assistant Conservator, is engaged in this work. The revision of the working plan for the forests of Erode range could not be attended to owing to changes of officers in charge of *Central Coimbatore* division.

A survey by the Survey of India and an allotment of staff have been arranged for the preparation of the final working plan of the Nilambur teak plantations which will be started by Mr. R. Bourne after the present north-east monsoon.

Control.—The following were the important deviations:—*South Canara.*—The exploitation in Chittur, Bakudi, Chinkramale and Durgamale fuel and Uppinangadi timber working circles is behindhand chiefly for want of demand. Narimogar fuel coupe II was not worked as coupe I was not completed. The exploitation in Mulliar fuel working circle having fallen in arrears, the period of rotation was extended and the coupes were rearranged. *North Malabar.*—The work in Begur coupe is in arrears; sub-coupe C commenced last year and coupes D and E of coupe XVIII were completed. *South Malabar.*—Thinnings in Edacode and Karumpoya and clearing parasites in Edacode plantations were not completed. *The Nilgiris.*—The improvement fellings in Mudumalai working circle were resumed, the old stock of timber having been disposed of. The prescriptions of the plan for plantations were carried out except certain minor works. *Kollegal.*—The work in Araipalayam fuel working circle is backward owing to exploitation of smaller areas for want of demand. The first rotation for the sandalwood areas in Bailur and Madeswaranmalai was over in 1910-11. The rest of the plan has been broken up by the appearance of spike disease and the havoc resulting from it. The sandal working plan in *North Coimbatore* remained in abeyance for the same reason. *Central Coimbatore.*—The areas under the hay working circle in Erode range were transferred to the management of panchayats. Bamboos were not extracted from Sholakarai and Walayar working circles as per prescriptions of the working plan owing to the appearance of general seeding followed by the death of the whole stock; but dead bamboos were removed from certain areas. The Bolampatti working plan except for the Chinnar working circle was unworkable. *South Coimbatore.*—The Talinji working plan was set aside pending revision, and felling in the Varigali valley was stopped pending the construction of export road. The size and location of coupes in the fuel working circles has not been followed for many years for want of demand for the produce.

(*b*) *Preliminary Working Plans Reports.*

8. *South Canara.*—The preparation of a working scheme for the extraction of overmature timber in 48·95 square miles of ghat forests exploitable by the Kasaragod river was completed by Mr. Hart, Extra Assistant Conservator, and it has since been sanctioned. Systematic working was continued in one bamboo and three fuel coupes in *Kollegal* and nine fuel, ten bamboo and three sandalwood coupes in *North Coimbatore.* But as yet there are no working plans for these areas.

(*c*) *Annual Plan of Operations.*

9. The following were the important deviations besides those mentioned under (*a*).—*South Canara.*—Mulliar coupe road was not constructed as the produce was floated. The construction of Range quarters at Coondapur and of subordinates' lines at Kollumoguru was postponed as funds were required for other works. The Deputy Ranger's quarters at Herur were not constructed owing to delay in the acquisition of site. The stone-lining of some of the forests was not undertaken pending verification of boundaries. *North Malabar.*—A well at Tholpatti was not sunk, and some demarcation of forests was not carried out owing to discrepancies in boundaries. *South Malabar.*—Serambi and outhouses at Erambadam were not constructed as they are now considered unnecessary. *The Nilgiris.*—The construction of subordinates' lines at Kargudi was postponed for want of labour, also a road in Coonoor peak plantations, as the estimate was not ready. *Kollegal.*—Araipalayam-Gundal bridle path was not constructed for want of funds and the subordinates' quarters at Mathipuram, pending revision of establishment. The building of a rest house at Doddasampagai was postponed and will perhaps be cancelled. Fencing the compounds of certain rest-houses and the fire protection of Gundal valley were not taken up for want of establishment. *North Coimbatore.*—Onnaitittu and Ullurthanda coupes were not exploited for want of demand. The following works were not carried out for want of funds and establishment:—Tracing and estimating for Kanavoicombai-Ugnium and Kavalur-Gundri bridle-paths, extension of Hassanur-

Hulikerai road, repairs to certain roads, rest-house at Chennampatti, subordinates' lines at Bailathur, Chennampatti and Ullurthanda, wells at Jeergahalli, Chennampatti and Ullurthanda, demarcation of North Bargur and acquisition of minor enclosures in Gutialattur. *Central Coimbatore.*—Improvement fellings in Tadagam and Mettupalayam forests were not carried out the working plans not having been sanctioned; some of the fuel coupes were not sold for want of offers. Inspection shed at Sottayur and Anaimulli-Chindakki bridle-path were postponed in accordance with the provision in the quinquennial scheme. Anaiarkandi-Muthikolam bridle-path was not undertaken the trace not having been made. The demarcation of Anaikatti forest was not done as it was not notified under section 16 of the Forest Act. *South Coimbatore.*—Coupe XXIII of Tekadi leased forest was not felled as coupe XXI was not completed. Subordinates' lines in the Varigali valley and at Pothumadai and Deputy Ranger's quarters at Tekadi were postponed in favour of urgent works. Elephant kraals in the Varigali valley were not constructed for want of labour as well as the dams in the Amaravati valley owing to change of rangers. The Mount Stuart ghat road was not commenced as the investigation and preparation of estimates by the special Forest Engineer were not completed. Apart from finishing the incomplete works of the previous year the following chief works were carried out *though not provided in the Plans of Operations. South Malabar.*—Carrying out experiments and observations regarding reproductive power of bamboo, improvement of a channel from Nilambur to Karumpoya for floating purpose, construction of Ranger's quarters at Nedvugayam, reconstruction of Nellikutta serambi and repairs to Chanakundumukku-Mundakadavu road. *North Coimbatore*—Felling fuel in certain coupes which were in arrears and sandalwood in Mavahalla coupe VI. *Central Coimbatore.*—Opening of a bamboo coupe in Chenat Nair reserved forest. *South Coimbatore.*—Construction of subordinates' lines at Palar and of outhouses at Attaikatti and eradication of lantana.

2. Communications and Buildings.

(*a*) *Roads and bridges.*

10. The amount spent under this head was Rs. 47,303 against Rs. 45,251 in the previous year; of the former, a sum of Rs. 25,155 was spent on new works and the balance on repairs against Rs. 23,180 and Rs. 22,071 respectively in 1913-14. *Important new works of the year—South Canara.*—Construction of Haladi-Rattadi and Herur-Hulimeshpare roads 8¼ miles: *North Malabar.*—Construction of a cart-track from Mysore frontier to Bavali, 3 miles of Brahmagiri-Ampalaparai bridle-path and bridges on the Kottiyur road. *South Malabar.*—Construction of 5 miles of a bridle-path in the Silent Valley. *The Nilgiris*—Mudumalai—Torapalli road was commenced; construction of a cart-track and an inspection path in Cairnhill plantation; commencement of Mudumalai-Doddakatti bridle-path. *Kollegal.*—Improvement of Hossore-Ponnachi bridle-path (14 miles). *North Coimbatore.*—Eight and three-fourths miles of ghat roads at a cost of Rs. 7,351 were completed. *South Coimbatore*—Construction of a cart road to tap Punachi working circle and completion of Muttialkanavoi-Manthorai cart road.

The work of Forest Engineer.—This officer arrived in this circle in November 1914 and works under the direction of the Superintending Engineer, IV Circle, Public Works Department. He was first engaged in revising an estimate for the new Mount Stuart ghat road—a distance of about 5 miles. This necessitated checking and inspection of the trace. A considerable improvement was made in the alignment of the road and an estimate costing Rs. 31,000 was prepared against the previous one of Rs. 73,309. This work was finished about the close of May 1915. The designs and estimates having since been found faulty and incomplete by the Superintending Engineer, are being revised. He was also engaged in checking the Tekadi tram trace. A continuous trace up the ghat as an alternative to the "inclined plane" was attempted and proved successful. The cost of the two investigations including the pay of the Forest Engineer and the cost of his establishment as debited in the accounts of the Public Works Department amounted to Rs. 6,894. Owing to the unhealthiness of the localities, there were constant interruptions and progress was not satisfactory. One of the subordinates died and another had to be sent away on leave.

Tramways—South Coimbatore.—The tramway in Tekadi leased forest was extended. The year's working showed a net profit of Rs. 2,416 against a loss of Rs. 754 in the previous year. All the bullocks having been engaged in carting timber to the plains, the buffaloes and a few pairs of hired bullocks were used in tramming. The outturn of work during the year was 4,328 ton miles against 2,105 in the previous year and the working charges decreased from Rs. 2-10-2 to Rs. 1-9-9 per ton mile.

(*b*) *Buildings.*

11. The expenditure on new buildings amounted to Rs. 30,799 and on repairs and maintenance to Rs. 10,667; the figures for the previous year were Rs. 27,776 and Rs. 12,114 respectively. The principal new works of the year were—*Rest houses*—two at Poochipara and Tiruvizamkunnu in *South Malabar* and one each in *Kollegal* and *North Coimbatore* commenced last year were completed. One was constructed in *Kollegal* and three were in progress in *North Coimbatore*. *Serambis*—Doddakatti camp in the *Nilgiris* was completed. *Inspection sheds, store houses, etc.*—Commencement of one inspection shed in *South Canara*. A depot office and store room at Beypore in *South Malabar* was constructed. *Range offices*—Two in *South Canara*, one each in *North* and *Central Coimbatore* commenced last year were completed. *Range quarters.*—Completion of one each in *South Canara* and *North Coimbatore* and commencement of one in *South Malabar*. *Subordinates' lines.*—Completion of two sets in *North* and *South Coimbatore*; two were also in progress in the former; construction of one set each in *Central* and *South Coimbatore*; one in the *Nilgiris* was commenced.

(*c*) *Miscellaneous works.*

12. The chief works of the year were—sinking two wells in each of the *South Canara*, *South Malabar* and *Kollegal* divisions; three were completed and four in progress in *North Coimbatore*. Dams were constructed in the Kolvalli and Bavali rivers in *North Malabar* and the floating channel from Nilambur to Karumpoya in *South Malabar* was improved. The botanical garden at Manantoddy in *North Malabar* was fenced. The tank at Kaikerai in Gutialattur reserved forest in *North Coimbatore* was repaired. The total expenditure incurred during the year was Rs. 8,181.

In accordance with the advice of Mr. Beadon-Bryant, late Inspector-General of Forests, a scheme for construction of roads and buildings in the circle for the quinquennium commencing from 1914-15 was prepared, and approved tentatively by the Board of Revenue after the close of the year.

Telephone.—The telephone service in *South Coimbatore* had frequent interruptions. Additional facilities to keep the service in order have since been promised by the Telegraph department. When the line was in working order, it was useful.

3. Protection of Forests.

(*a*) *General Protection.*

13. The year's offences are classified and compared with those of the previous year in the following statement:—

Class.	Injury to forest by fire.		Unauthorised felling or appropriation of wood and minor forest produce.		Grazing without permission or in tract in which grazing is prohibited.		Other offences.		Total cases.	
	1913-14.	1914-15.	1913-14.	1914-15.	1913-14	1914-15.	1913-14.	1914-15.	1913-14.	1914-15.
Cases taken into Court ..	25	11	388	420	112	152	80	75	605	658
Cases compounded ..	62	54	1,911	1,693	455	474	214	233	2,642	2,454
Cases undetected ..	331	133	21	31	..	15	..	2	352	181
Total ..	418	198	2,320	2,144	567	641	294	310	3,599	3,293

Note.—It is reported that one of the Revenue Divisional Officers in *Central Coimbatore* has not furnished the return of offences dealt with by him.

The only variation calling for remark is the decrease under "injury by fire," which was due to an exceptionally favourable season. The action taken last year for the suppression of sandalwood thefts in *South Canara* appears to have been effective so that very few cases were reported in the current year. There was some increase under "illicit grazing" in the *Nilgiris*, attributed to the introduction of revised regulations for grazing and to the closure of the Wenlock Downs to free grazing. Several breaches of the new regulations were let off with warnings.

The number of offences prosecuted during the year was 658 and there were 140 pending from last year. Out of a total of 798 cases, 683 were disposed of during the year and 115 remained pending. The 683 prosecuted cases resulted in 624 convictions, 58 acquittals and one withdrawal; the percentage of conviction was 91 or about the same as in the previous year. The punishments inflicted by Magistrates are reported to be generally satisfactory. A most important case of theft of timber on a large scale in *South Malabar* in which a ranger was also suspected of having connived was prosecuted and resulted in the acquittal of the accused for want of evidence. An action is now pending against the ranger.

Offences Compounded.—The number of cases compounded and the amount of fees realized were 2,041 and Rs. 23,488, respectively, against 2,422 and Rs. 35,793 in the previous year. The decrease was mainly due to the suppression of sandalwood thefts already mentioned in *South Canara*. There was also some fall in the number of reported offences in unreserved lands in *Kollegal*, *North* and *Central Coimbatore*.

Working of the rules for compounding grazing offences.—The rules were followed in the *Nilgiris* and *Coimbatore* and are reported to have worked well. They were not adopted in *South Canara* and *Malabar* as there was no necessity.

Holding adjacent villages responsible for commission of offences in particular forests —North Malabar.—The ryots of one of the villages adjoining two blocks of forests were warned that the occurrences of fires would involve the closure of grazing areas. The notifications issued in previous years on the subject were in force in *Kollegal* and *North Coimbatore* and there was no occasion to enforce the penal conditions. *Central Coimbatore.*—There was a large number of illicit fellings in blocks II and III of Bolampatti and the adjoining villagers were warned of the closure of the forests to grazing. The warning is said to have brought down the number of offences. *South Coimbatore.*—Nothing was done on the ground that the forests are away from all villages but evidently they were not distant enough to prevent offences being committed. The system is not workable in *the Nilgiris* and is not required in *South Malabar*.

14. *Rewards—South Canara.*—Rewards amounting to Rs. 47 were granted to two deputy rangers and a guard for detecting thefts of timber and illicit shooting, Rs. 5 to a village potail for detecting a case of illicit transport of sandalwood and Rs. 20 to two tannahdars for reporting cases of illicit transport of timber; also Rs. 70 to informers. *The Nilgiris.*—The Game Association paid Rs. 20 to a ranger and Rs. 10 to two guards for detecting a case of poaching. *Kollegal.*—A Police head constable was rewarded Rs. 4 for his help in detecting a case of illicit removal of produce. *North Coimbatore.*—Rs. 29 to seven persons in two cases of removal of timber and fuel. *Central Coimbatore.*—Rs. 32 to three guards and one watcher. *South Coimbatore.*—Rs. 38 to six persons in two cases of illicit shooting.

(*b*) *Protection from Fire.*

15. *Special protection.*—The usual measures were adopted for the protection of forests. The year was specially a favourable one due to early rains. The area in which protection was attempted during the year was 1,139 square miles against 1,129 in the last year, the increase being due to extension of protection to additional areas chiefly in *South Canara* and *North Coimbatore*; the percentage of successful protection was 99·2 against 90·4 in the previous year. As in last year, the assistance of hill tribes in *South Coimbatore* was enlisted and the attempt was more successful; they earned a reward of Rs. 177 for their services. The expenditure per square mile of area attempted to be protected was Rs. 24–3–6 against Rs. 26–3–6 in the previous year.

16. *General protection.*—The area attempted was 2,482 square miles against 2,494 in the previous year; the decrease was due to transfers to special protection. The percentage of failure was 1·4 against 6·7 in the last year. The reporting of fire occurrences in these areas continued to be unsatisfactory.

17. The number and origin of fires during the year are given in appendix A. The number of fires decreased by 59 per cent. and the area burnt by 83 per cent.

The results in *North* and *South Coimbatore* and *Kollegal* leave room for much improvement. These divisions were responsible for 26,500 acres out of a total of 29,300 acres burnt. On the other hand, the valuable forests in *North Malabar* and Mudumalai in *the Nilgiris* which sufferred severely last year were successfully protected.

(*c*) *Protection against Cattle.*

18. Goats are not allowed to browse in forests. Fourteen per cent. of the total forest area was closed to all animals throughout the year and 75·9 per cent. open. Eighty-four square miles closed in the previous year as communal punishment in *Kollegal* were thrown open and 44 square miles in *North Coimbatore* consisting of areas under exploitation and the Minchiguli valley with a view to protection of timber therein were closed. The number of animals impounded compared with the figures of the previous year and the average of the past three years is given in appendix B. The number of impoundings increased from 8,933 to 9,338; the increase was chiefly in *the Nilgiris*, that in *Central Coimbatore* being ascribed to better supervision; there was also a marked decrease in *South Coimbatore* which is attributed to the transfer of certain areas to the management of panchayat.

(*d*) *Protection against injuries from natural causes.*

19. *Spike disease in sandal.*—A survey of the spike areas in the Bailore working circle, *Kollegal*, was carried out under the direction of the Conservator. From the margin of the attacked area and outside it a belt—100 yards in width—was demarcated throughout the working circle; and within the belt every sandal tree and plant was uprooted. These were naturally all healthy individuals. Within the belt all zizyphus, which carries a disease similar if not identical with spike, was also eradicated. The idea was to isolate the healthy sandal outside the belt from the possibility of infection through either root contact or the carriage of the disease by insects. The work was begun in February and completed by May. It is still too early to judge of the efficacy of this measure, but up to the time of writing there have been no instances of the disease crossing the line. If immunity is continued for the space of twelve months from the time of clearing there would be fair reason for hoping that this measure is at any rate a check upon the spread of spike, but at least two years of immunity should be obtained before it could be claimed that it stops the disease. In other areas of *Kollegal* and *North Coimbatore* spike has continued to spread throughout the working circles.

Lantana.—In May 1914 standing orders were issued for the preparation of working schemes where necessary, providing for three successive annual clearings of lantana commencing with the current coupes and compartments of areas under working plans. The orders have been carried out and schemes have been sanctioned in the *North Malabar* and *South Coimbatore* divisions. In other divisions, eleven acres were cleared in fuel coupes in *South Canara*, 118 acres in the plantations in Nilambur, and 65 acres of fuel coupes in *Central Coimbatore.*

Prickly-pear.—Orders for the preparation of similar working schemes for the eradication of prickly-pear have lately been issued. One hundred and forty acres have been cleared in four fuel coupes in *North Coimbatore*, and in *Central Coimbatore* there have been clearings in coupe VII of Odanthorai working circle and in the Kanjikoil reserve.

Teak defoliator.—Owing to timely rains the Nilambur plantations were almost free from attacks during ten months of the year; but in May and June 1915 extensive attacks were experienced in the young plantations of Neuungayam in the course of which six plantations were almost completely defoliated. The attack was also fairly

severe in several plantations in Nilambur range. Experiments were tried with two Andre Maire traps but one was soon destroyed by elephants and the other was probably not correctly adjusted as it failed to attract moths.

4. Sylviculture.

(*a*) *Natural Reproduction.*

20. The seeding of the large bamboo (*Bambusa arundinacea*) is spreading. The final seeding commenced in the plateau tracts from the north about two years ago and spread southwards. Practically the whole of the Wynad in *Malabar* and *Nilgiris* has seeded as has *Kollegal* and *North Coimbatore* and the lower slopes of the *Nilgiris* in *Central Coimbatore*. Upon the ghats in *South Canara* and *Malabar* all the upper slopes have gone, and sporadic seeding is extending to the heavy bamboo jungles at the foot. Partial seeding has been going on down here for two or three years. It is impossible to say, although it is probable, that a general seeding will follow. If so it will be a serious thing later for the timber floating industry and will interfere for some years with any bamboo pulping schemes. As regards other species, the germination of *Xylia dolabriformis* on laterite tracts and of *Hopea parviflora* in the Canara valleys was exceptionally promising as was that of Rosewood and *Pterocarpus Marsupium* in the Minchiguli valley, *North Coimbatore*. And on the whole the year was generally more favourable than the preceding one.

(*b*) *Artificial reproduction.*

21. *Regular plantations.—North Malabar.*—Two acres were added to the Begur teak plantation. In the *Nilgiris* the experimental plantations of timber-yielding *Eucalyptus* were maintained but nothing else is reported about them. In *South Coimbatore* there was no extension of the Karianshola plantations but the teak, rosewood and vengai plants put out to replace casualties in the rains of 1914 survived the hot weather owing to the favourable season. The regeneration operations prescribed by working plan in Punachi and the fuel working circles were unfortunately failures. In *Central Coimbatore* 13,398 pits were sown and 7,000 basket plants were put out in various fuel working circles, again without success. There has been a consistent record of non-success with these operations in *Central Coimbatore* owing probably to their unsuitability to such dry forests and orders will be issued to discontinue them.

Taungyas—South Canara.—In Kasaragod range 41 acres and 41 acres in Coondapur were given out for Kumri to forest labour but results are not reported. *North Malabar.*—In Kanoth the Kurichiyars were given 210 acres, whilst in Begur 65 acres were granted to Kurumbers. Of this only 9 acres were felled and sown with teak, but here again results have not been reported. Attempts are to be made to settle Kurumbers on Kumries in the Mudumalai range, the *Nilgiris*.

Cultural operations—South Canara.—In all ranges pit and broadcast sowings were carried out by subordinates with some success in the case of teak, *Hopea parviflora* and *Terminalia tomentosa*. *North Malabar.*—The group system of teak sowing in pits, prescribed in the Begur and Chedleth working plans, was carried out on a considerable scale. Forty-five per cent. of success is reported in Chedleth. In the fuel coupes of Kanoth 3,600 teak seedlings were planted. In *South Malabar* an attempt is to be made to underplant the teak with *Hopea parviflora*, rosewood, *Artocarpus hirsuta* and other species and a nursery was opened towards the end of the year. *North Coimbatore.*—Some basket planting of rosewood and vengai at Geddesal last year has turned out successfully. A good deal of dibbling of sandal and other species was attempted but is reported as only partially successful. In *South Coimbatore* attempts to fill up blanks in fuel coupes were again unsuccessful and will now be discontinued. In *Kollegal* about 500 acres were dibbled with sandal under bushes towards the end of the year. The results are not yet available. Four hundred lbs. of *Acacia arabica* seed was sown in Dodda Induvadi reserve and has germinated profusely.

(c) Operations for the improvement of the growing stock.

22. *South Canara.*—Light improvement fellings with creeper cutting were carried out in 4,700 acres at a cost of Rs. 724 and as a result it is reported that seedlings of valuable species are showing up most satisfactorily. In *North Malabar* creeper cutting and girdling were done in the felled areas of the previous year. *South Malabar.*—Five hundred and ninety acres of teak plantations in Nilambur range and 216 acres in Amarampalam range were thinned, accompanied by creeper cutting and weeding. In the *Nilgiris* marking for thinnings was made in three plantations. In *North Coimbatore* all the sandal coupes of the year were cleared of creepers and all useless species were girdled in the fuel coupes. In *Kollegal* soft woods were girdled in the Gundal and Araipalayam coupes. Nothing is reported from *South* and *Central Coimbatore*.

(d) Experiments.

23. *Rubber.*—At Tannir in *South Canara* is not doing well; nor in *South Malabar.*

Swietenia Mahagoni.—The experimental trees at Panayangote (*South Malabar*) are flourishing, also those in the office compound. Those planted as avenue trees in Karumpoya are keeping good condition.

Swietenia macrophylla.—These are doing well everywhere at Nilambur.

Bamboos.—Two-thousand seeded bamboos were cut and floated to Beypore in order to ascertain the cost of floatage of dry bamboo in connection with Mr. Nelson's bamboo pulp scheme. Six-thousand green bamboos were cut under three methods to test the former estimates of felling and dragging to river side and at the same time to ascertain the effect of different felling methods on regeneration, and separate registers have been opened for all works. The total cost to end of June was Rs. 2,134. The cost of floatage has far exceeded the estimate, probably for the reason that it was commenced too late in the year (January or February) and the journey appears to have taken several months.

Eucalyptus.—The 11 varieties planted in the Arboretum block, Cairnhill, the *Nilgiris*, show very slow growth.

5. Exploitation.

(a) System of Management.

24. The various sylvicultural systems in force over the areas for which working plans have been sanctioned are summarised below :—

Sylvicultural system.	Area in square miles.	Percentage of total area under each sylvicultural system.
Method of clear fellings by compartments	31	1·92
Selection method	346	21·38
Simple coppice	4	·25
Coppice with standards	338	20·89
Method of improvement fellings	202	12·48
Forests for which working plans have been prepared but not subjected to any definite system of working ...	697	43·08
Total ...	1,618	100

(i) Major Forest Produce.

(1) *Clear or regeneration fellings*—Nil.

25. Awaiting the first felling in the Nilambur teak plantations.

(2) *Selection fellings.*

26. *South Canara.*—Selection fellings were carried out over a portion of coupe VI of Madibare timber working circle and 160 mature trees in Someshwar coupe X were sold standing. *North Malabar.*—Three hundred and fourteen acres in coupe XVIII of Begur and 486 acres in coupe II of Chedleth were felled. *The Nilgiris.*—Sandalwood yielded 500 maunds in Sigur range. Owing to the appearance of "spike"

disease the selection fellings in the sandal working circles in *Kollegal* and *North Coimbatore* have been suspended. *Kollegal.*—Spiked and dead sandal trees were extracted from portions of coupe VI of Madeswaranmalai and coupes I, III and V of Bailur, from certain areas outside these two working circles and from coupes I to V of Gundal fuel working circle; the total number of trees extracted was 5,381. *North Coimbatore.*—Seven thousand one hundred and twenty-two spiked and dead sandalwood trees were removed over an area of 8,704 acres. *South Coimbatore.*—Coupe XXI of Tekadi leased forest (400 acres) and coupe VIII of Punachi working circle (71 acres) were felled.

(3) *Simple coppice.*

27. Thirty-eight acres of the Eucalyptus plantations in Ootacamund and Coonoor were coppiced for the supply of the public and the Wellington Cantonment.

(4) *Coppice with standards.*

28. In *South Canara* fifteen fuel coupes covering about 532 acres in Coondapur and Sankaranarayana and portions of two coupes in Puttur and Kasaragod were cut; as were 14 acres in Udipi for supplying sandalwood oil stills. *North Malabar.*—Twenty acres in Kanoth were felled for the fuel supply of the town of Tellicherry. In *North Coimbatore* 12 coupes—988 acres—were worked for fuel supply and 95 acres for drag poles and agricultural implements. In *South Coimbatore* 8 coupes of 335 acres, in *Central Coimbatore* 23 coupes of 1,631 acres, and in *Kollegal* portions of 4 coupes covering 223 acres were felled for the fuel supply of neighbouring towns and villages.

(5) *Improvement fellings.*

29. *South Canara.*—Coupe 3 of Nerankimale was worked for the fuel supply of Mangalore. In *South Malabar* the thinnings in the teak plantations yielded 12,181 trees and saplings. Five hundred acres in compartments 2 and 3 of block I, Mudumalai, in *the Nilgiris* yielded 44,241 cubic feet of teak and 4,496 cubic feet of other species as well as 172 teak poles. In *South Coimbatore* coupes VII and VIII of Punachi and coupe 1 of compartment II, Mount Stuart, were worked for improvement fellings.

(6) *Unregulated fellings.*

30. *South Canara.*—Firewood required for working 75 stills was removed from unreserved lands. Timber was also removed from unreserved lands on payment of seigniorage. In *South Malabar*, 362 dead and windblown trees were removed from Nellikutta and new Amarampalam forests on payment of a fixed value. In the *Nilgiris*, the demand for small timber, fuel, etc., was met as usual by issue of permits. In *North Coimbatore*, 25,137 cubic feet of timber and 13,919 cubic feet of fuel were removed on permits from unreserved lands.

(ii) Minor Forest Produce.

(1) *Bamboos.*

31. Ten blocks in *North Coimbatore* covering 22,376 acres, eleven blocks of 3,413 acres in *Central Coimbatore* and two blocks as well as seeded bamboos in three blocks in *South Coimbatore* (areas not reported) were leased out. Removals on permits were allowed in *North Malabar*, the *Nilgiris* and *Kolleyal* to meet local demands, from the natural forests of *South Malabar* for floating timber by purchasers and from unreserved lands in *South Canara.* Bamboos were also extracted departmentally from Kanoth forest in *North Malabar* for supply to Tellicherry town.

(2) *Miscellaneous Produce.*

32. Minor products of importance were generally leased out with the following exceptions:—*By Departmental Agency*—Manufacture of catechu in *South Canara*, collection in Mudumalai and Tunakadavu ranges in the *Nilgiris* and *South Coimbatore* respectively and all produce except tamarind, tanin barks, soapnuts, pungam seeds and date leaves from reserved forests in *North Coimbatore* and *Kollegal* divisions

(3) *Extraction of fodder grass.*

33. Fodder grass was removed on permits in *South Malabar* and *Coimbatore*. The concession of free removal of grass is not wanted in *Malabar* as the demand is met from private forests and unreserved lands. In other districts there was no necessity for it. The free removal of thatching grass from reserved forests in *South Canara* and by the Todas of the plateau and the Chetties of Mudumalai in the *Nilgiris* was continued.

34. (4) *Hay-making.*—Nil.

(5) *Grazing.*

35. Goat browsing is entirely prohibited. The forests of *South Malabar* are closed to grazing. Elsewhere grazing was, as usual, controlled by issue of permits. During the year, the block system of grazing by which permits are applicable to specified areas instead of to all forests was introduced in the *Nilgiris*. Free grazing on the Wenlock Downs was stopped as the damage caused by cattle lessened the value of the Downs as a recreation ground. The number of cattle licensed to graze on payment was 399,437 against 373,476 in the previous year.

(*b*) *Agency of Exploitation.*

(i) Departmental Agency.

36. *Major produce—South Canara.*—Felling in one timber; and for part of the year nine fuel coupes after which all fuel coupes were sold standing. Extraction of stumps of sandalwood trees stolen from unreserved lands; also some light improvement fellings. *North Malabar.*—Felling of 87,479 cubic feet of timber in Begur coupe XVIII and 16,400 cubic feet of fuel in Kanoth reserved forest. *South Malabar.*—Thinnings of teak poles and saplings in plantations. Spokes and felloes were manufactured from the top ends of teak saplings. *The Nilgiris.*—Improvement fellings in Mudumalai and extraction of sandalwood in Sigur range. Sandal fellings in *North Coimbatore* and *Kollegal*. *Central Coimbatore.*—The rectification of contractor's faults in some fuel coupes. *South Coimbatore.*—Selection fellings in Tekadi leased forest and improvement fellings in Punachi and Mount Stuart working circles and transport of timber from the leased forests to depots.

Minor produce.—The details are mentioned in paragraphs 31 and 32 *supra*.

37. *Disposal of produce at the edge of the forests.*—In *South Canara* fuel was sold on a small scale at Mulliar reserved forest and in some of the coupes; 35 chowks of fuel obtained from the improvement fellings in Pilarkan and about 732 cubic feet and 651 cubic feet of timber in Hulimeshepare and Parappa were sold at the edge of the forests. In *South Malabar*, there has been a great improvement in this respect. No less than Rs. 42,150 worth of thinnings were for the first time sold on plantation boundaries instead of being dragged and floated as hitherto to Beypore for sale. Some fuel felled departmentally in *Kollegal* and a few drag poles in *North Coimbatore* were sold in the forest. In *South Coimbatore* the timber felled in Punachi coupe was disposed of in the same way.

(ii) By Purchasers.

38. One timber and all the fuel coupes in *South Canara*, the timber selection fellings in compartments II and III of Chedleth in *North Malabar*, Araipalayam fuel coupe VII in *Kollegal* and all the fuel coupes in *North*, *Central* and *South Coimbatore* were sold standing to contractors. In the *Nilgiris* 2,361 cubic feet of standing timber in reserved forests and 42 cubic feet of unclassified timber from the Mudumalai working circle were so removed. The felling and removal of about 400 windblown and uprooted trees in Nellikutta natural forest in *South Malabar* were given on contract. Also the unregulated fellings and the exploitation of bamboos and miscellaneous produce referred to in paragraphs 30, 31 and 32 *supra*.

(iii) & (iv) By Right-holders and under privileges and free grants.

39. The quantity and estimated value of produce removed by right-holders and free grantees are given in the following statement:—

	Timber.		Fuel.		Bamboos.		Grass and grazing.	Other minor produce.	Total.
	Cubic et.	Value.	Cubic feet.	Value.	Number.	Value.	Value.	Value.	Value.
		Rs.		Rs.		Rs.	Rs.	Rs.	Rs.
Right-holders	36,175	14,470	..	..	..	..	780	..	15,250
Free grantees	3,761	964	340	6	8,920	67	91	179	1,307
Total ..	39,936	15,434	340	6	8,920	67	871	179	16,557

The estimated value of produce and grazing enjoyed by right-holders and removed by free grantees was Rs. 15,250 and Rs. 1,307 respectively against Rs. 20,474 and Rs. 2,195 in the previous year. The Badagas in the *Nilgiris* continued to remove fuel on payment of a nominal fee of Re. 1 per annum per house. In *South Canara*, free grants amounting to Rs. 569 were made for churches, temples and other religious institutions and Rs. 160 to works of public utility. The grants made in other districts were chiefly for rebuilding houses destroyed by fire and produce was usually removed from unreserved lands.

(c) Outturn and sources of forest produce.

40. The outturn of produce collected by different agencies as compared with that of the previous year is given in the following abstract :—

Agency of exploitation.	Timber including sandalwood in cubic feet.		Fuel in cubic feet.		Bamboos in number.		Minor produce including grass and grazing in rupees.	
	1913-14.	1914-15.	1913-14.	1914-15.	1913-14.	1914-15.	1913-14.	1914-15.
By Government Agency ..	256,604	437,121	1,634,965	640,149	168,545	98,757	28,229	24,151
By purchasers	370,524	468,886	2,532,559	3,937,306	4,788,599	7,303,240	144,205	147,014
By right holders	49,077	36,175	..	..	1,210	..	856	780
By free-grantees	8,390	3,761	3,415	340	13,405	8,920	470	270
Total ..	684,595	945,943	4,170,939	4,577,795	4,961,759	7,410,917	173,760	172,215

By Departmental Agency—Major produce.—The increase under "timber" was in *North Malabar*, the result of the exploitation of a larger area in the Begur working circle, in *South Malabar* to a larger yield from thinnings and windblown trees in teak plantations and in the *Nilgiris* to the fact that in the previous year the improvement fellings in Mudumalai working circle were stopped on account of the accumulation of stock. The extension of the contract system in *South Canara*, *Kollegal*, *North* and *Central Coimbatore* divisions, the felling of poorer areas in *South Coimbatore* and a somewhat decreased demand for firewood by the Military Department in the *Nilgiris* chiefly accounted for the decrease under 'fuel'. *Minor produce.*—"Bamboos"—The decrease was mainly in *South Canara* due to the sale of coupes standing to contractors. *Other produce.*—The total outturn decreased from 153 to 96 tons; the decrease was due chiefly to a poor crop of gallnuts, honey, etc., in *North Coimbatore* and to the stoppage of hay-making operations.

By Purchasers—"Major produce."—The increase under "timber" was due mainly to extensive sales of trees on darkhast lands chiefly in *South Canara* while that under "fuel", to replacement of departmental working by contractors. *Minor produce—"Bamboos"*—The increase was chiefly in *South Canara* and was due to the sale of coupes standing and to the working of larger areas in *North* and *Central Coimbatore*. *Other produce.*—There was an increase under "grazing collection" which is explained in Chapter III and a decrease under "other produce" which is distributed over all the districts and calls for no special remarks.

CHAPTER III.—FINANCIAL RESULTS.

41. The financial results of the year compared with those of the previous year and with the average of the five preceding years are tabulated below :—

——	1914-1915.	1913-1914.	Average for the preceding five years.
	Rs.	Rs.	Rs.
Revenue	* 9,12,063	8,41,735	7,77,773
Expenditure—			
Refunds	6,208	†7,189	4,174
A. Conservancy and Works ..	5,59,205	4,18,683	4,46,290
B. Establishments	3,65,862	3,66,169	3,45,700
Total expenditure ..	9,31,275	7 92,041	7,96,164
Net ..	— 19,212	+ 49,694	— 18,391

* Excludes Rs. 25 relating to the Southern Circle.
† Excludes Rs. 3,588 relating to the Bombay Presidency.

The gross receipts were the highest on record for the Circle and exceeded those of the last year and the average of the preceding five years by 8·4 and 17·3 per cent. respectively. The net results also would have beaten any previous record but for an extraordinary charge of Rs. 1,74,849 incurred for the acquisition of Mudumalai and Kumbarakolli leased forests in the *Nilgiris* Sixty per cent. of the receipts was from major produce, 9 per cent. from grass and grazing, 12 per cent. from minor produce including bamboos and 19 per cent. from miscellaneous sources. Of the expenditure, 24 per cent. was spent on exploitation of the forests, 50 per cent. on their upkeep and improvement and 26 per cent. on miscellaneous items. The estimated value of timber and other produce in sale depots at the close of the year was Rs. 17,469 against Rs. 89,709 at its commencement. The revenue outstanding was Rs. 73,663 of which only Rs. 14,030 fell due within the year.

The important variations between the actuals of the year and those of the previous year are explained below :—

Receipts.

(i) *By Departmental Agency.*

Timber + 49,875. The increase was in *North Malabar* due to larger fellings and in *South Malabar* to a larger outturn of plantation teak logs and to better prices obtained during the year; this increase was partly counterbalanced by a large decrease in *South Coimbatore* where transport of timber to the plains was brought to a stop since December 1914 owing to the road from Topslip having fallen in disrepair.

Fuel — 16,229. Due chiefly to extension of contract system.

Bamboos —3,800. Due to sale of bamboo coupes to contractors in *South Canara* to a smaller number of bamboos used for floating timber in *South Malabar* and to want of demand in *Kollegal.*

Sandalwood + 45,275. Due to extraction of sandalwood from unreserved lands in *South Canara* and to a larger outturn in *Kollegal* and *North Coimbatore.*

Minor produce + 2,136. The increase was due chiefly to sale of last year's stock in *Kollegal* and *North Coimbatore* and to better prices obtained for gallnuts in the former district.

(ii) *By Purchasers.*

Timber + 2,308. Due chiefly to increased revenue by sale of trees on darkhast lands.

Fuel + 4,891. Due to increased receipts from unreserved lands in *South Canara* and to better prices obtained for fuel coupes in *North* and *Central Coimbatore.*

Bamboos —7,964. Due to non-realization of lease amounts in *North Coimbatore* before the close of the year.

Grazing + 3,722. Due to introduction of the block system in the *Nilgiris*, to a larger number of foreign cattle licensed in *Kollegal* and to increased demand for fodder grass in *North Coimbatore.*

Minor produce —3,322. Due chiefly to poor crop.

(iii) *Miscellaneous (including confiscated drift and waifwood).*

—6,564. Due chiefly to abnormal receipts during 1913–14 in *South Canara* as a result of the campaign against systematic sandalwood thefts.

EXPENDITURE.

The increase of Rs. 1,40,522 under '*A. Conservancy and Works*' was due chiefly to the reason mentioned in the beginning of this Chapter. There was a small decrease of Rs. 307 under '*B. Establishments*' which calls for no special remarks.

CHAPTER IV.—ADMINISTRATION.

42. The charge of the Circle was held by Mr. C. D. McCarthy throughout the year.

District and Range charges.—There were no alterations during the year.

Establishment.—The inadequacy of trained rangers continues to be keenly felt. At present no less than eight range charges out of a total of 31 are in the hands of untrained deputy rangers. This state of things is not confined to this Circle and it was unanimously decided at the last Conference of Conservators to recommend an increase of the present proportion of Government students to be deputed for training to the Forest College.

43. *Work of superior officers.*—Extracts of Collectors' remarks are appended—*South Canara*—By Mr. A. J. Curgenven—" M.R.Ry. V. Raman Menon and Mr. Hart have discharged thei duties satisfactorily." *Malabar—By Mr. Innes—North*—"Mr. Littlewood worked hard and camped well, and such reports as I have received from him have showed care, industry and intelligence." *South*—" Mr. Bourne's work maintained its usual high standard. I have been much impressed in all reports I get from him with the thoroughness with which they have been prepared. *The Nilgiris—By Mr. Young*—" The work of both officers (Messrs. S. Cox and R. D. Richmond) was all that could be desired. Mr. Habibulla Sahib did his work conscientiously and on the whole well. His health was however not always good." *Coimbatore—By Mr. A. R. Cumming—Kollegal*—" M.R.Ry. P. Venkataramanan has worked with keenness and industry but his relations with the local Revenue officials have not been harmonious and his touring has not been as thorough as it should have been." *North*—" Mr. Wood's work throughout the year was characterized by marked efficiency and thoroughness. His intimate personal knowledge of the conditions of the forests in his division has been of the greatest value to me. Mr. Woodhouse Adolphus has still to prove his qualifications for the post he holds." *Central.* " The work of the superior staff was satisfactory." The officers in the division were M.R.Ry. Chengappa and Mr. Hodgson for a few days and Mr. Habibulla Sahib. *South.* " Mr. Fischer has worked zealously and well. Mr. J. H. Longrigg was posted to the charge of the Tunakadavu range in January 1915 and has taken a keen interest of the work in the range. Mr. Robinson has shown himself diligent and eager to learn."

44. *Executive establishment.*—The work of rangers is generaly well reported on. L. S. Janes, E. B. Ramachandra Rao, A. R. Narasimha Ayyangar and A. Nicholas are singled out for special mention. One ranger was suspended and is to be prosecuted criminally in connection with theft of timber, one was reduced temporarily for bad work and one of the directly appointed probationary rangers was reduced to deputy ranger and subsequently resigned. The work of deputy rangers was fairly satisfactory. One deputy ranger was dismissed and the probation of three was terminated.

45. *Protective staff.*—The conduct of foresters with a few exceptions was not satisfactory. No improvement among the lower ranks of foresters and guards is reported *Punishments*—One forester was dismissed, the services of one were dispensed with, six foresters were reduced and two suspended. *Guards.*—Dismissals 8, removals from service 22, suspensions 29 and reductions 7.

46. *Ministerial establishment.*—The post of temporary draftsman in the Circle office and in the Divisional offices of *North* and *South Coimbatore*, *North Malabar* and *South Canara* was made permanent. The establishment is reported to have

worked on the whole satisfactorily. The head clerks of *South Malabar*, *the Nilgiris*, *North*, *Central* and *South Coimbatore* are specially mentioned for good work. *Punishments —Divisional offices.*—One clerk and the draftsman in *South Coimbatore* were reduced temporarily. *Range offices*:—One clerk in *South Malabar* was dismissed, the services of one in *Central Coimbatore* and three in *South Coimbatore* were dispensed with; one in *Kollegal* and two in *Central Coimbatore* were suspended. The range establishment is reported to be wanting inefficiency. The manager and staff in the Conservator's office worked with zeal and efficiency.

47. *Health of the establishment and casualties.*—The health of the establishment was on the whole good in *North Coimbatore*, fair in *South Canara* except at foot of the ghats, fairly satisfactory in *Kollegal* and bad as usual elsewhere except on the *Nilgiri* plateau. *Deaths*—One in each of the *Nilgiris*, *Kollegal*, *North* and *South Coimbatore*. A large number of subordinates have had to be granted leave on medical certificate. At the end of the year five rangers were absent from duty on this account.

48. *Relations between Revenue and Forest officers.*—The relations continued to be cordial with the exception of the instance in *Kollegal* referrred to in paragraph 43 *supra*. The District Forest Officer, *South Coimbatore*, and all Range officers in *South Canara*, one Range officer in *Central* and *South Coimbatore* attended the jamabandi. Such attendance is not required in *Malabar*; in the *Nilgiris* the officers are reported to have been in constant touch with each other. No complaints of importance were brought to the notice of the jamabandi officers.

49. *Service books.*—Maintained and verified up to the close of the financial year except in the *Nilgiris* where they were verified to the close of the calendar year.

50. *Tours of the Forest Member.*—The Hon'ble Mr. R. C. C. Carr inspected the plantations in *South Malabar*.

51. *Conservator's inspection.*—All the District Forest offices were inspected with generally satisfactory results except as regards *Kollegal* and *Central Coimbatore*. The disorder in the former was however due to the gross inefficiency of two Range officers. The forests of *North* and *South Malabar*, *the Nilgiris*, *Kollegal* and *South Coimbatore* were also inspected. The total number of days spent in camp was 187.

52. *Touring of District Forest officers.*—With the exception of the District Forest officers, *South Malabar*, *the Nilgiris*, *Kollegal* and *Central Coimbatore* the others spent in camp more than the minimum period of touring prescribed. The short touring in *South Malabar* is ascribed to the fact that the greater part of the area under working was within the five-mile radius, in the *Nilgiris* to Mr. Cox having disposed of his camp kit in anticipation of his taking furlough and to his stay at Head-quarters for a month on account of an operation to his hand. The apparent deficiency in *Central Coimbatore* and *Kollegal* was due to the charge of these divisions being held by neighbouring District Forest officers for 8 and 5 months respectively.

53. *Inspection of Range offices.*—All Range offices except one in each of *North* and *South Malabar* and the *Nilgiris* were inspected and found generally in good order with five exceptions. With the exception of the sale depots at Beypore in *South Malabar* and at Kargudi in the *Nilgiris*, all were inspected. The Kargudi depot was not inspected for want of time and the stock at Beypore was found to be correct at the time of sale so that no inspection was necessary. One depot keeper in *South Coimbatore* was suspended and the services of another were dispensed with.

54. *Audit of accounts of District Forest offices.*—The accounts of all the offices except *South Canara*, *Central* and *South Coimbatore* were audited by the Local Fund Audit establishment. The Assistant Accountant-General inspected the accounts of the *Nilgiris* and *Central Coimbatore*. The results are reported to be satisfactory.

55. *The Madras Forest College, Coimbatore.*—Four deputy rangers passed the College with the higher standard certificates, one of whom was awarded a prize for field engineering. Three rangers, one directly appointed probationary ranger and one deputy ranger were deputed for training for the 1914–16 course.

56. *Imperial Forest Research Institute and College.*—One probationer for the Provincial Service was under preliminary training ir *South Canara* and deputed to the College.

57. *The Vernacular Training School.*—The year's session was held in *Central Coimbatore.* Students from the *Nilgiris*, *Kollegal* and *South Coimbatore* also were deputed for training. The strength of the school at the start was 29 of whom one deserted subsequently. The course was not completed until after the close of the year.

CHAPTER V.—GENERAL.

58. *Realization of revenue from the usufruct of toddy-yielding trees, etc.*—Revenue from this source was realized only in *South Canara* and *Kollegal*—Rs. 1,531 and Rs. 22 respectively, against Rs. 2,152 and Rs. 30 in the previous year.

59. *Measures adopted to encourage the growth of manure-leaf-yielding trees and shrubs.*—No action was found necessary in this direction as the demand was met in some districts from private forests and patta and unreserved lands and in others such measures were not required.

60. *Supply of forest produce to meet the wants of the people—South Canara.*—The concession of free removal of thatching grass, used also at times as fodder, and of grass and leaves from a portion of the Baindur reserved forest was continued. No abuse of this concession was brought to notice. Timber and fuel were retailed in certain depots. *Malabar.*—Owing to ample supplies in private and unreserved lands there is practically no demand upon the reserves. *The Nilgiris.*—The removal of small timber, fuel, bamboos and other produce on permits was as usual allowed. The Badagas continued to enjoy the concession of obtaining their annual supply of fuel on a nominal payment of Re. 1 per house, and the public of Coonoor and Ootacamund were supplied with firewood from the plantations. Firewood and charcoal were also sold in retail in depots. *Kollegal.*—The supply to the public of small timber, agricultural implements and bamboos through the agency of monigars and permit-issuing officers was continued; but the issues were small as the people are able to get almost all their requirements from unreserved and patta lands. There is no demand for fuel from the reserves except for the supply of Kollegal town. *North Coimbatore.*—The supply of fuel and bamboos was made through the agency of contractors The demand for small timber and agricultural implements was met by retail sales and periodical auctions at forest depots. But very little business was done owing to the supplies available in unreserved lands. The supply of forest produce in *Central* and *South Coimbatore* was met from contractors' coupes of which there are large numbers. The removal of brushwood in head loads from coupes under working was continued in all the *Coimbatores.*

Forest Committee's Report.

61 (*a*) *Classification of forests.*—The classification of reserved forests in the circle was completed. Four small reserves in *South Canara* and *Kollegal* were disafforested during the year.

(*b*) *Management by village panchayats.*—There is a very small area of class V forests in this circle. Except for one in *Kollegal* and two in *South Canara*, they are all small isolated blocks in the Erode and Dhārāpuram taluks. Out of 9 in *Central* and 7 in *South Coimbatore*, 7 and 5 respectively have been handed over to panchayats. The amount of revenue assessed on these forests is given below :—

	Name of reserve.	Area in acres.	Amount of grazing revenue fixed.
			Rs.
Central Coimbatore	Ellapalayam	196·08	56
	Sullipalayam	445·70	160
	Sinnaveerasangali	934·18	260
	Virumandampalayam	707·14	192
	Arachalur (plains)	1,686 29	372
	Tambikalayam	273·69	21
	Pandiyampalayam (portion)	180·00	13
South Coimbatore	Ganapati	414·31	150
	Talavoipatnam	323·57	
	Sennakalpalayam I bit	103·53	
	Do. II bit	101·06	
	Utiyur	932·07	35

In *Central and South Coimbatore* the panchayats were found to be admitting a much larger number of cattle than the possibility. In *South Coimbatore* the management is otherwise pronounced to be satisfactory in the case of the first four areas. One or two panchayats are reported to have started works of improvement, such as clearing prickly-pear, repairing wells and fencing. Utiyur forest was handed over to a panchayat during the latter part of the year. A feature of panchayat management is the immediate raising of the grazing fee. The old Government fee of 3 annas has been raised in some cases to Re. 1 and even Rs. 1-8-0 per head Chembugudde reserved forest and two small pieces of unreserved lands near Udipi and Karkal in *South Canara* were also managed by panchayat. The working of the panchayat has not been reported on.

(*c*) *Opening of small coupes for rural supply wherever an effective demand exists or can be stimulated into existence.*—There is no demand for such coupes in this circle as coupes sold to contractors, private forests and unreserved lands meet the requirements. A trial coupe was opened in *North Coimbatore* and the fuel felled remained unsold and had to be written off. Another coupe was advertised but there were no offers.

(*d*) *Measures adopted for improving the water-supply in Government grazing grounds and the facilities for grazing and pasturage.*—In *Kollegal* one well in the Chikkailur reserved forest and another in Madeswaranmalai were repaired by the graziers and subordinates free of cost. In *North Coimbatore* the tank at Kakkarai in the Gutialattur reserved forest was repaired at a cost of Rs. 880. In *South Coimbatore*, no advance was made in this direction owing to changes among subordinates. No steps are necessary in *South Canara*, *Malabar* and *the Nilgiris*.

(*e*) *System of patrol by a gang of subordinates* —The system is believed to have been introduced in *South Canara*, certain parts of the *Nilgiris* and in *Central* and *South Coimbatore*. But no reports have been received except from *South Coimbatore* which states that the staff is too small to make the system effective. I have, however, discussed the subject with several District Forest officers and agree in the opinion expressed by them, viz., that, with the present paucity of the class which should hold control of the patrol section (Deputy Rangers and Foresters), it is impossible to constitute the sections without either leaving a considerable portion of the forests without inspection, or making them so large that inspection at one end would leave the rest of the section unprotected for too long a period.

62. *Grant of cowles for the formation of casuarina plantations in sandy areas.*—Nil.

Rules under the Forest Act.

63. (*a*) *Timber transit rules.*—The rules are reported to have worked satisfactorily in *South Canara*, *North Malabar* and the four divisions of *Coimbatore*. In *South Malabar* the registration of property marks alone was in force.

(*b*) *Rules under section* 26 *of the Forest Act.*—The rules worked satisfactorily and the privileges conferred by them were availed of by the public. There was no change in the area of unreserved lands under the control of the department.

(*c*) *Other rules.*—Sandalwood transit rules referred to in the previous report were sanctioned and brought into force in *South Canara*. In the *Nilgiris* the shooting rules remained unaltered and the fishing rules were re-notified for one more year with slight modifications regarding trout and masheer fishing.

64. *Hill tribes.*—The co-operation of the hill tribes in the matter of providing labour for departmental works, collecting miscellaneous products and planting blank areas has progressed. They were granted leases of lands free or on nominal rent in all districts except *South Malabar* where a proposal to lease out 32 acres in unreserved lands to some mulcer watchers was under consideration. Eighty-two acres were leased out to Kudubies and Mahratties in *South Canara* for Kumri cultivation, six acres in *North Malabar* to Kurichiyars for ponam cultivation, 1,229 acres free of rent to Sholagars in *North Coimbatore* and 795 acres to the Irulars in *Central Coimbatore*. There were no fresh leases to the Sholagars in *Kollegal*. The existing free leases to hill men in *South Coimbatore* were continued. These hill men were also employed on fire-protection work on the system of grant of rewards on results. In the *Nilgiris*

Kurumbers in Mudumalai and Benne forests were employed as elephant attendants and on fire protection. It is hoped to settle more Kurumbers in the *North Malabar* and Mudumalai forests.

65. *Cultivation in reserved forests.*—Tenant-at-will leases covering 21 acres were continued in *South Canara* on an annual rent of Rs. 24. In *North Malabar* 210 and 478 acres for ponam and wet cultivations respectively at an annual rent of Rs. 2-8-0 per acre were leased out. In *South Malabar* the lease of 4 acres in the old Amarampalam reserved forest for paddy cultivation was renewed for one year on an annual rent of Rs. 10. Another lease of 120 acres in the new Amarampalam reserved forest which was renewed last year for two years is still in force. In the *Nilgiris* the Irulars on the eastern and southern slopes were allowed to cultivate lands in ten places covering 151 acres. It is to be feared that there have been several unauthorised clearings and the condition that these men should provide labour for the department has not been enforced. The leases in *Kollegal* and *North Coimbatore* for cultivation on payment of rent continued. Fresh leases for cultivation on the Anamalais in *South Coimbatore* were granted to planters during the year. The location of residential settlement on the Anamalais in the midst of the planting area was sanctioned and about 20 acres of forests were cleared of growth for the purpose.

Live and dead stock.

66. (*a*) *Elephants.*—Twenty-four elephants were captured during the year and there were two births; seventeen were sold for Rs. 37,000, one was killed by a wild tusker, three died and one was transferred to Upper Gōdāvari; the number remaining at the close of the year was 119. Of the deaths one was a new capture, another was old and the third was suffering from diarrhœa due to irritation caused by bots. The condition of the other animals was good.

(*b*) *Bullocks and buffaloes.*—Eighteen bullocks were purchased during the year. The casualties of the year comprised six deaths (four on account of old age, one due to snake-bite and one killed by a tiger), five sold as unfit for forest work and twelve condemned and destroyed. The number of bullocks that remained at the close of the year was 64. Of the 51 buffaloes that remained at the commencement of the year, six died from anthrax, six from other disease and one was sold leaving a balance of 38.

(*c*) *Veterinary establishment.*—Mr. F. X. Mascarenhas, Special Veterinary Inspector, inspected the live-stock in the different districts and attended to their ailments. There was a sudden outbreak of anthrax at Nilambur in an area where elephants and buffaloes were at work. It was due to the prompt and capable action of the Special Veterinary Inspector that there was no loss in the elephant stud. The Assistant Veterinary Inspector M.R.Ry. S. N. Tammayya who was in charge of the live-stock in *South Coimbatore* is reported to be a capable and zealous officer and to have proved himself of great service.

(*d*) *Inventory of valuable stock.*—Stock registers are reported to have been maintained and verified at inspections. The value of the live-stock and stores at the close of the year was Rs. 3,27,757 and Rs. 3,63,503, respectively.

67. *Rain-gauges.*—The rain-gauges were maintained and readings recorded in all districts. There was no improvement in recording the readings in *South Canara.*

68. *The Gass Forest Museum and the garden.*—The control of the museum was transferred to the Principal of the Madras Forest College in January 1915 and the exhibits were accordingly removed to the new building. The garden in the compound of the Conservator's office was maintained as usual and Rs. 160 were realized by sale of flowers, fruits and plants.

69. *Suits.*—The appeal preferred by the lessee of private forests in the Attapadi valley in *Central Coimbatore* in connection with a claim to a right of way over the Mangarai-Anaikatti path through the Tadagam reserved forest was dismissed. There were no other suits of importance.

COIMBATORE,
29*th September* 1915.

C. D. McCARTHY,
Conservator of Forests,
Western Circle.

ADMINISTRATION REPORT OF THE MADRAS FOREST COLLEGE, COIMBATORE, FOR THE YEAR ENDING 30TH JUNE 1915.

CHAPTER I.

1. The office of Principal was held by Mr. F. L. C. Cowley-Brown, Deputy Conservator of Forests, throughout the year.

2. The appointment of instructors were held by the following officers during the year :—

(1) C. B. Dawson, Esq., Deputy Conservator of Forests, throughout the year.

(2) H. C. Bennett, Esq., Deputy Conservator of Forests, from 4th December 1914.

(3) M. R. Ry. K. R. Venkataramana Ayyar Avargal, Extra Assistant Conservator of Forests, throughout the year.

(4) J. A. Aranha, Esq., Extra Assistant Conservator of Forests, from 27th July 1914.

(5) M. R. Ry. C. Srinivasa Rao Avargal, B.A., up to 4th December 1914 when he reverted to the post of Curator, Gass Museum, and Science Lecturer to the College.

The posts of Sub-Assistant Surgeon attached to the College were held by Mr. T. S. Pichu Ayyar from 5th November 1913, to throughout the year under report and by A. R. Shanmuganathan from 1st July 1914 to 17th September 1914 when he proceeded for military service. From 17th September 1914 onwards one division of the College had no medical officer.

3. In January 1915 the Gass Forest Museum was transferred to the charge of the Principal from that of the Conservator of Forests, Western Circle. The former Curator Muhammad Aziz-ud-din was appointed Special duty Officer in the Gass Museum for the purpose of assisting in the transfer, etc., of the museum to the new site.

4. The Hon'ble Mr. R. C. C. Carr vacated on 15th January 1915 the Presidentship of the Board of Visitors and was succeeded by the Hon'ble Mr. H. F. W. Gillman.

Mr. P. M. Lushington, Conservator of Forests, filled the vacancy on the Board of Visitors caused by the retirement of Mr. J. S. Battie on 3rd November 1914 and Mr. S. Cox joined the Board on 26th January 1915 as Acting Conservator, *vice* Mr. H. B. Bryant on leave.

5. The Board of Visitors met at Coimbatore in June when the final examinations were held and the College prizes and certificates were awarded. The number of senior division students at the end of the course was 29.

The following list in order of merit shows the certificates awarded :—

Honors.	Circle or State to which attached.
1. T. G. Sankaran Nayar	Southern Circle.
2. R. Srikanta Pillai...	Travancore.
3. P. Velayudan Nayar	Do.
4. T. N. Kochunni Tirumalpad	Private student.
Higher standard.	
5. A. K. Kandan	Southern Circle.
6. M. Ambu	Western ,,
7. B. Punnayya	Northern ,,
8. K. C. Joseph	Private student.
9. B. P. Tammayya	Coorg.
10. J. A. P. D'Cruz	Northern Circle.
11. C. S. Viraraghava Ayyar	Travancore.
12. Y. S. Chennigaraya	Private.
13. P. Miranda	Western Circle.

Honors.	Circle or State to which attached.
14. A. Sidda Pillai	Central Circle.
15. S. Ramanujam Sesha	Southern ,,
16. K. S. Ramiah	Private
17. R. Alagiriswami Nayudu	Central Circle.
18. E. W. Fernandez...	,,
19. I. John	Private
20. N. Vijiarangam	Northern Circle.
21. B. S. Ramaswami Ayyar	Western ,,
22. M. Muhammad Sheriff	Mysore.
23. B. C. Varadarajan	Do.
24. S. Jothinayagam	Northern Circle.
25. H. Myers	Western ,,
26. K. Kunjukuttan Raja	Travancore.
27. T. V. Ommen	Private.
28. R. Govinda Pillai...	Do.
Lower standard.	
29. T. Subba Rao	Mysore.

The Government and other prizes were awarded as follows :—

Name of medal.	Name of student.
Best second year student (gold medal)	T. G. Sankaran Nayar.
Do. in Forestry	Do.
Do. in Engineering	Do.
Do. in Botany	Do.
Campbell Walker prize for the best all round Ranger ...	Do.
Indian Forester prize for an essay	Do.
Principal's prize for Sylviculture	Do.
Survey prize awarded by the President, Board of Visitors.	T. N. Kochunni Tirumalpad.
Lodge prize for Engineering	M. Ambu.
Brasier Memorial prize for the best out-door Ranger ...	J. A. P. D'Cruz.
Coonoor Project Plate prize awarded by Mr. R. D. Richmond.	R. Srikanta Pillai.

6. The students of the 1913–15 division were examined by the District Medical and Sanitary officer of Coimbatore, in first aid. Twenty-five students were successful in gaining the St. John Ambulance Association certificate.

Chapter II.

For the year under report 34 students were nominated to join the College on 1st August 1914 for the 1914-16 course: namely 22 Government students, two State students from Mysore, four State students from Travancore, 1 from Cochin and 5 non-stipendiary private students. Two students failed to join, and one student within the first week was removed as he was unwilling to continue the course. In his place a Government student was selected from the Central Circle.

The list of students admitted is attached. Out of these 32 students two were withdrawn from the College for incapacity leaving 30 in residence for the second year course.

7. The final examinations in Mathematics and Physical Science for the 1914–16 division were held in June 1915.

Medals for the best junior student in Forestry, for the best junior student in Survey, for the best junior student were presented by the members of the Board of Visitors. They were all won by C. M. Kunhiraman Nayar.

Chapter III.

8. The year under review has been one of steady progress for the most part unmarked by incidents of grave importance.

9. The new College was not completed by the close of the year, and consequently the move to the new site was once more postponed. The new Gass Museum was handed over to the Principal on 18th February 1915, the transfer of show cases being effected by Messrs. Srinivasa Rao and Aziz-ud-din. The task of arranging and furnishing up the exhibits has proved far more lengthy than was anticipated, but it is now approaching completion.

The lack of adequate protection from the sun and rain, due to the peculiar type of architecture adopted, will, it is feared, seriously affect the welfare of the more delicate specimens.

10. The even tenour of the College routine was necessarily interrupted by the mobilization of the five volunteer students to perform garrison duty at Wellington and Karteri. These students were for two or three months absent from the cold weather tour, but under the orders of Government were given special averages. Student J. A. P. D'Cruz (Sergeant) was highly commended by his Commanding Officer and Adjutant for his work and influence in the corps. Over Rs. 1,300 was subscribed by the College to the War Relief Fund.

11. The 1913–15 division contained some very good men and one student of exceptional ability—the average of the 1914–16 division is somewhat lower.

The examiners reported that the senior division was well grounded and at the same time recorded some valuable suggestion for the course of instruction and training.

12. The age of the Government students, referred to in last year's administration report, is similarly in the 1914–16 and 1915–17 Divisions, higher than is consistent with the assimilation of the full benefits of the College training.

The average and the maximum ages of these Government students is as follows:—

1914–16 Government students. Average 28–5.

Students	over	30	years	7
Do.	,,	31	,, ...	5
Do.	,,	32	,, ...	3
Do.	,,	33	,, ...	3
Do.	,,	34	,, ...	3
Do.	,,	35	,, ...	2
Do.	,,	36	,, ...	2
Do.	,,	37	,, ...	2
Do.	,,	38	,, ...	1

1915–17 Government students. Average 27–4.

Students	over	30	years	5
Do.	,,	31	,, ...	4
Do.	,,	32	,, ...	3
Do.	,,	33	,, ...	2
Do.	,,	34	,, ...	2
Do.	,,	35	,,	

13. The 1914–16 division consists at present of 20 Government students. The conduct report register of one has not been received. Of the remainder the conduct report of one is very good, of eight good, of four fair and of six moderate.

Of the 22 Government students of 1915–17 division conduct report registers have not been received in the case of two students: of the remainder the conduct report of one is very good, of five good, of eight fair, of four moderate and of two bad.

14. The conduct of the students on the whole has been quite satisfactory. No serious breaches of discipline has occurred, and the House Committee is gradually realizing its responsibilities. It is under contemplation to accord the House Committee certain special privileges.

15. The weight of the students at the end of the year showed an increase over that recorded 12 months previously. The improvement in physique, bearing, and general smartness was most marked. All students requiring it were vaccinated at the beginning of the rains term. The health of the College throughout the year has been generally satisfactory.

16. The Standing Orders were consolidated and printed to form a code of the internal regulations of the College. The rules of the Athletic Club, the detailed allocation of marks subject war to each examination and tour, a memorandum on camp administration and the history of the College and Gass Museum (the latter compiled by Mr. Srinivasa Rao) were also printed. A draft calendar was prepared for the Press.

17. The Hon'ble Mr. A. G. Cardew and the Hon'ble Mr. R. C. C. Carr visited the students at field work in headquarters, and the Hon'ble Mr. H. F. W. Gillman inspected the camp and road construction operations at Ootacamund.

18. In October 1914, the Principal selected non-stipendiary private students for the 1915–17 course. One applicant for a private-studentship who sent up a Secondary School-Leaving Certificate containing false entries, was declared permanently debarred from entering the College.

19. The cold weather tour commenced on November 1st and ended on February 28th. The junior students were taken for a preliminary tour of 10 days in August and September in the Bolampatti valley under the Principal and Mr. J. A. Aranha. The hill tour occupied the months of April and May. The touring arrangements were this year placed directly under the officers in charge of divisional camps: Mr. Dawson being in charge of the junior division camp for the whole touring season, and Mr. Venkataramana Ayyar in charge of the senior division camp until December 4th when he relinquished his duties as camp officer to Mr. Bennett. After Christmas Mr. Srinivasa Rao, in accordance with the orders of the Board, did not accompany the College on tour as Botany Instructor.

20. *Cold weather tour*: 1914–15.—The senior division visited Walayar (Central Coimbatore) Chittoor Kodivengamabhavi, and Kodur (Cuddapah district), Mamanduru (Chittoor), Bolampatti (Central Coimbatore), Yercaud, Noganur and Jowlagiri (Salem, North).

The junior division camped at Nilambur and Nedungayam (South Malabar), Mount Stuart (South Coimbatore), Bolampatti (Central Coimbatore), Trichinopoly and Mundanthurai (Tinnevelly division). The operations carried out did not differ greatly from those executed in previous years. A fine Irish bridge was constructed at Kodivengamabhavi and useful river training was undertaken at Bolampatti. The sylvicultural work included sample plots, and marking for thinnings and retention of standards.

The Bolampatti camp consisted of both divisions and as previously benefit was derived from both divisions being together. The final survey examination of the senior division was held here, each student being given three coolies and an independent area to survey. The junior division made an enjoyable and instructive excursion to Muthikulam.

The visit of the senior division to Yercaud was less profitable than had been anticipated, and might be dispensed with in future years. At Noganur this division (divided into parties) made a working plan. The junior division derived distinct profit from the tour to the Padugais near Trichinopoly, where St. Joseph's College Industrial School was also visited with advantage. At Calicut they paid an instructive visit to the oil and saw mills. During the whole of their tour special stress was laid on the relations of soil to tree growth.

21. *Hill tour*.—The senior division were in camp at Bandyshola about five miles above Coonoor in tents, and the junior division at Ootacamund in the Fernhill lines occupied during the previous two hill tours. The work of both divisions may be gauged by the following extract from a note prepared for the Board of Visitors:—
"The special work of the College during the hill tour this year has been (in addition to the general study of the sylvicultural problems presented by the varying types of forests visited).

Senior division.—Kargudi: Thinnings of degraded forests for the District Forest Officer. Study of improvement fellings, road system and fire protection. Elephant lectures by the Veterinary Assistant and practical work in harnessing and management of elephants including Kraals and nursery. Timber dragging and elephant capturing were also studied.

Bandyshola (five miles above Coonoor).—The alignment of four roads (aggregating four miles five furlongs) for the exploitation of Teneriffe, Bleak House, Coonoor Peak, Old Forest and Spring Field. This is the most important engineering work the College has ever undertaken and will enormously appreciate the value of these forests. It was previously anticipated that the services of the Forest Engineer would be required for the project, but the division has proved itself equal to this ambitious task.

Other engineering works undertaken.—(1) Preparation of contour maps of Coonoor Peak R. F. including survey of all existing and proposed roads and bridle paths. (2) Preparation of separate plan of roads connected with the land acquisition. (3) Collection of data and preparation of proposition statement for the acquisition of the land involved. (4) Preparation of detailed reports, estimate and specification with longitudinal and cross-sections drawn to scale for all new roads aligned. (5) Study of ground for construction of fuel slides in Coonoor Peak R. F. (6)

Preparation of final reports, with full working details and estimate of the new roads for District Forest Officer, Nilgiris. (7) Construction of particularly difficult piece of road along one of the proposed alignments (for demonstration purposes) and also in order to collect data for the rates proposed in the estimate.

The following plantations were marked for thinnings:—Newman, Eucalyptus 549 trees marked. Coonoor Peak: Frenella, Cupressus and Pinus: 10·7 acres of 1,671 trees marked. Sim's Park: small plantations of Syncarpia and Buchlandia marked.

Junior division.—Checking and rectification of the boundaries of Arambi and Cairn Hill. One compartment in Muthinad marked for thinning. Charcoal operations in Muthinad. Alignment and complete construction of a bridle path (about one mile) in Cairn Hill. Thinning of Pinus Longif Pinus Marit and Frenela. Wounding the soil for the purpose of provoking the regeneration.

Study of the problem of timber production of nine new Eucalyptus species in three plantations at 6,000′, 7,000′ and 8,000′. Volume measurement by calculated form factor for Frenela and Cupmacracarpa sample plots. Measurement of sample plots in Muthinad reserve. Study of Eucalyptus Oil distillation.

In future years apart from general sylvicultural studies, there is ample scope for work in carrying out the prescriptions of Mr. Cox's working plan, *e.g.*, the checking and correction of boundaries, of enclosures, the survey alignment and cutting of compartment and block lines, thinnings and improvement fellings, charcoal making, construction of roads and especially of slides, etc.

Botanically the students' knowledge and horizon are greatly enlarged by the opportunity of studying the exotics and shola trees *in situ* and in Sim's Park and the Government Gardens.

The physical benefit of the hill tour scarcely needs demonstration. The students lead the ideal Forester's life—they have very few lectures and are out in the field from 7-30 A.M. till 4 P.M. or later in the finest of climates. At Coimbatore they undoubtedly have to undergo a prolonged intellectual strain, and the change in their bearing and alertness by the end of the hill tour is most noticeable."

22. The summer term (June 15) was occupied with a brief refresher course and by the final examinations. Sanction was obtained for the employment of outside examiners in the major subjects. The Board of Visitors which met on June 27th 28th, 29th and July 1st discussed some forty subjects including the draft calendar. The following are amongst the most important resolutions arrived at:—Nilgiri tour to be reduced to one month annually for each division. Yercaud, Javadis, Cuddapah and Chittoor tours to be abolished: Mathematics to be removed from the syllabus, and science to be reduced: Principal to be given an annual allotment for the maintenance of the college estate: one periodical examination abolished: marks reallotted giving 500 marks for Range Administration and Law now combined as major subject: construction of Principal's bungalow to be expedited: "Honours" Government students to be guaranteed IV grade Rangerships: "Higher Standard" Government students to be guaranteed VI grade Rangerships: students to be given 15 days' joining time after leaving the college: House Tutor to be granted free quarters: Principal to be given an annual allotment for purchase of books: also power to have all college printing carried out locally, students' uniforms slightly modified in one suit: seigniorage not be charged on timber supplied departmentally to the college.

The majority of these recommendations have been submitted for the orders of Government.

23. Sanction of the Government of India was received this term to the proposal to pay all Government students of the rank of Deputy Rangers a fixed stipend of Rs. 50 (inclusive of travelling allowance).

24. The athletic life of the college has during the year been systematised and developed. Under the stimulus of a system of college colours, awarded only to those who attain a certain standard of efficiency, a great keenness is evident in the college games. The college was victorious in 12 out of 27 matches played. At the athletic sports meeting held in October J. A. P. D'Cruz secured the Champion Challenge Cup.

The Marathon race run in January over seven miles of undulating country at Bolamapatti was won by A. K. Kandan. Practically the whole college competed. On tour the students were instructed in swimming. Mr. Bennett since he joined the staff has been in charge of the Athletic Club. In addition to squad, fire and whistle drill which form part of the college curriculum the senior division under the leadership of student D'Cruz voluntarily trained themselves in physical drill and gave a demonstration to the Board of Visitors.

25. The stock of the college was carefully checked in October and again in July after the close of the year under report. Steps were taken to counteract several irregularities that had gradually crept in. The necessity for a detailed scrutiny of the stock and accounts by a professional officer unconnected with the College is an increasingly urgent necessity. During the year the Store-keeper's branch was entirely separated from the Head Clerk's branch of the Principal's office, and rules of office procedure were drawn up. The administration of the Head Clerk's and Store-keeper's branch was extremely unsatisfactory. The permanet Head Clerk Mr. Pattabirama Ayyar was granted leave on the grounds of ill-health in May. His successor Mr. Krishnaswami Ayyangar has effected a great improvement in the method, punctuality and efficiency of his branch of the office, but the staff is admittedly inadequate as regards both number and quality.

26. The thanks of the Principal are due to those officers in whose divisions the college has toured, for their co-operation and assistance in making all arrangements possible for the comfort of the camps. Mr. R. D. Richmond was indefatigable in affording direct help to the college during the hill tour and showed a tangible and practical interest in the engineering work of the senior division at Bandyshola, by undertaking the laborious task of correcting the Coonoor project plates. He also very kindly presented a prize for this project.

Lieut.-Colonel Fernside and his Assistants Messrs. Madhava Menon and Viswanatha Sarma were good enough to undertake and supervise the Final examination in First Aid, for which St. John Ambulance certificates were awarded to the successful students.

The college is indebted this year to several officers and well-wishers who have given books to the library and trophies to the Museum.

27. The Staff of the College has as usual worked with a whole-hearted devotion to duty, and with the single object of producing highly trained and practical Rangers. Mr. Venkatramana Ayyar's departure, after three years of strenuous work of the highest professional merit, is a serious loss to the college, and to his powers of organisation in the responsible post of House Tutor the present standard of the college discipline is in no small measure due.

Madras Forest College, Coimbatore,, 1914–16 *division.*

Number and Name of Student.	Circle or State to which attached.
Government Students.	
1. W. Balakrishna Mudaliyar	Northern Circle.
2. K. Raghava Rao	Do.
3. C. T. Tiruvengadam	Do.
4. K. T. Venkatachar	Do.
5. T. E. Varadachari	Do.
6. C. M. Kunhiraman Nair	Central Circle.
7. K. G. Sundararaja Rao	Do.
8. A. Kannappa Mudaliyar	Do.
9. M. Krishna Ayyar	Do.
10. K. G. Srinivasa Rao	Do.
11. Saiyid Vazih-ud-din Sigbatullohi	Southern Circle.
12. Saiyid Manavar	Do.
13. C. H. Ashe	Do.
14. P. A. Krishnaswami Mudaliyar	Do.
15. G. Devanayakam Nayudu	Do.
16. A. P. Sreenivasa Ayyangar	Western Circle.
17. A. Swamikutti	Do.
18. P. Krishnan	Do.
19. K. Kunhiroyan	Do.
20. S. Srinivasa Rao	Do.

State students.

21. D. Krishna Ayyangar	Travancore.
22. T. K. Prameswaram Pillai	Do.
23. K. Ramachendriah	Do.
24. Kerala Varma Tambiran	Do.
25. Gulam Russool	Mysore.
26. Korah Fenn	Cochin.

Private students.

27. B. Sambamurthi	Private.
28. T. S. Narayanaswami Chetti	Do.
29. T. R. Naganatha Ayyar	Do.
30. M. N. Raman Pillai	Do.

Madras Forest College, Coimbatore.

Summary revenue and expenditure for the Forest year 1914–15.

Head or service.	Revenue. Rs. A. P.
Receipts.	
V (*b*)	2,961 8 10
A.—Expenditure.	
I (*c*)	0 13 4
VI (*c*)	3,666 13 11
VII (*b*)	75 3 10
VIII (*e*)	11 8 6
VIII (*g*)	311 8 0
IX (*b*)	393 10 3
Total of A. ...	4,459 9 10
B.—	
I (*b*)	43,341 11 11
I (*c*)	19,082 10 3
I (*d*)	2,362 4 6
II (*b*)	5,381 10 0
II (*c*)	6,074 0 4
II (*d*)	685 11 2
III (*a*)	938 6 5
III (*b*)	612 13 0
III (*d*)	6,586 12 0
Total of B ...	85,065 15 7
Grand total of A and B ...	89,525 9 5

ABSTRACT showing the live stock, stores, tools, etc., for the year ending with 30th June 1915.

District.	Description of stock.	On hand at commencement of the year (from 1st July 1914). Number.	Amount.	On hand at the end of the year (up to 30th June 1915). Number.	Amount.	Difference in value in favour of the year.	Difference in value against the year.
			Rs. A. P.		Rs. A. P.	Rs. A. P.	
Madras Forest College, Coimbatore.	Surveying and other instruments.	717	6,270 7 7	1,151	6,944 13 9	674 6 2	..
	Tools	383	680 3 10	384	683 3 10	3 0 0	..
	Furniture	406	2,426 12 8	460	2,850 13 5	424 0 9	..
	Tents	101	10,370 8 3	116	11,271 2 3	900 10 0	..
	Uniforms and accoutrements.	244	592 11 6	308	828 6 11	235 11 5	..
	Science apparatus ..	2,474	2,422 6 0	4,074	3,120 2 0	697 12 0	..
	Carpentry tools ..	..	..	21	132 2 0	132 2 0	..
	Photographic instruments.	..	..	2	604 8 0	604 8 0	..
	Miscellaneous ..	455	1,660 3 9	487	1,737 1 9	76 14 0	..
	Total ..	4,780	24,423 5 7	7,002	28,172 5 11	3,749 0 4	..

TABLE OF CONTENTS.

	PAGE
Appendix A.—Abstract of fires	i & ii
Do. B.—Comparative statement of impounded cattle	iii
Area of reserved forests and reserved lands (No. 65)	iv & v
Progress made in, and the expenditure incurred on, forest settlements (No. 66)	vi to xi
Record of demarcation and maintenance of boundaries (No. 67)	xii & xiii
Progress made in working-plans (No. 69)	xiv & xv
Communications and buildings (No. 70)	xvi & xvii
Register of breaches of Forest Rules (No. 71)	xviii to xxvii
Area of forest tracts protected from fire (No. 72)	xxviii to xxx
Area closed and open to grazing (No. 73)	xxxi & xxxii
Return of grazing in the State forests (No. 74)	xxxiii to xxxviii
Artificial reproduction (No. 75)	xxxix to xli
Statement showing the outturn of timber and fuel and agency of exploitation (No. 76)	xlii to xlvii
Outturn of minor forest produce (No. 77)	xlviii & xlix
Account of timber, etc., in depots and sold locally (No. 78)	l to liii
Statement showing the value of timber and other produce at sale depots (No. 79)	liv to lvi
Summary of revenue and expenditure (No. 80)	lvii to lxiv
Summary of the above prepared in the Board's office	lxv & lxvi
Outstandings and liabilities on account of contractors and disbursers (No. 81)	lxvii
Revenue received and outstandings on account of revenue (No. 82) ...	lxviii
Statement of financial results (No. 83)	lxix
Statement of elephants, etc. (No. 84)	lxx & lxxi
Abstract of value of stores, tools and plants (No. 85)	lxxii

APPENDICES.

APPENDIX A.—Comparative statement of number and origin of fires that occurred during 1914–15.

District.	A. Fires caused by accident or through carelessness in burning fire lines.		B. Fires entering the forests by crossing exterior fire lines.		C. Fires beginning inside the reserves or fire traced areas.							
					Owing to carelessness or accident.							
					By workmen employed in the forests, by purchasers of forest produce and by hay cutters.		By villagers, travellers, etc., passing through the forests.		By railway engines.		By lightning or by fire balloons.	
	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Northern Circle.												
Ganjam	7	178	7	493	..	..	28	2,722	..	..	..	..
Vizagapatam	2	345	..	..	2	408	2	1,592	..	..	..	..
Godavari, Upper	..	..	21	63,184	..	..	1	..	..	..	..	..
Do. Lower	..	..	8	574	..	..	16	658	..	..	..	..
Kistna	..	..	..	..	..	..	3	32	..	..	..	..
Kurnool, East	2	323	6	5,755	..	..	..	..	..	..	..	..
Do. South	2	89	2	28,880	4	4,982	6	650	4	19	..	..
Do. West	6	344	6	8,479	..	..	9	530	3	107	..	..
Total	19	1,278	50	107,365	6	5,390	65	6,184	7	126	..	..
Central Circle.												
Bellary	38	88	..	90	..	..	17	3,092	4	266	1	320
Anantapur	3	7,554	2	..	1	12	4	213	..	..	..	..
Guntur	..	..	..	..	..	..	11	101	..	..	..	..
Cuddapah, West	3	4,102	21	30,012	4	1,446	2	850	..	..	..	..
Do. East	6	5,790	29	22,517	2	131	10	10,675	..	..	..	..
Nellore	..	..	5	330	..	..	2	63	..	..	..	..
Chingleput	..	..	..	..	..	..	..	..	..	..	..	..
Chittoor	..	..	7	2,701	..	..	6	828	..	..	..	..
Total	50	17,534	64	55,650	7	1,589	52	15,822	4	266	1	320
Southern Circle.												
North Vellore	3	191	..	..	..	..	1	18	..	..	..	..
South do.	..	..	..	..	..	..	4	97	..	..	..	..
South Arcot	..	..	..	..	..	..	..	..	..	..	..	..
North Salem	..	..	..	..	..	..	4	935	..	..	..	..
South do.	..	..	..	..	..	..	..	..	..	..	..	..
Trichinopoly	..	..	..	..	..	..	9	141	..	..	..	..
Madura	..	..	20	1,233	..	..	2	435	..	..	..	..
Tinnevelly	..	..	7	212	4	953	3	6	1	35	2	326
Total	3	191	27	1,445	4	953	23	1,632	1	35	2	326
Western Circle.												
South Canara	6	37	29	294	7	101	35	510	..	..	..	..
Malabar, North	1	40	1	9	..	..	..	..	..	..	..	..
* Do. South	..	..	..	..	1	100	..	..	..	..	..	..
* The Nilgiris	1	6	..	..	..	..	11	479	..	..	..	..
Kollegal	1	1,027	..	..	..	..	..	..	..	..	..	..
Coimbatore, North	4	14	..	..	4	160	9	647	..	..	..	..
Do. Central	3	34	1	100	1	9	3	26	..	..	..	..
Do. South	..	..	2	71	7	218	3	258	..	..	..	..
Total	16	1,158	33	474	20	588	61	1,920	..	..	..	..
Grand total	88	20,161	174	164,934	37	8,520	201	25,558	12	427	3	646
Grand total for 1913-14.	81	17,065	183	226,029	54	21,380	306	57,422	10	2,563	13	719

* Includes the number of fires in the areas not under special protection.

Appendix A—Comparative statement of number and origin of fires that occurred during 1914–15—*cont.*

District.	C. Fires beginning inside the reserve or fire-traced areas—*cont.*								Causes unknown.		Total of A, B, C and causes unknown.	
	By intentional firing.						Total.					
	In order to obtain new grass.		In order to turn out game or to reduce cover.		Maliciously fired.							
	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.
	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
Northern Circle.												
Ganjam	..	..	1	75	7	576	36	3,373	43	2,360	93	6,404
Vizagapatam	..	..	..	..	..	..	4	2,000	18	9,929	24	12,274
Godavari, Upper.. ..	* 3	67	..	..	..	..	4	67	5	729	30	63,980
Do. Lower.. ..	..	..	3	48	3	10	22	716	5	41	35	1,331
Kistna	..	..	..	..	..	..	3	32	..	..	3	32
Kurnool, East	10	701	2	210	14	9,625	26	10,536	5	269	39	16,883
Do. South	5	17,284	6	831	2	582	27	24,348	36	24,897	67	78,213
Do West	11	3,095	.	..	25	21,448	48	25,180	40	13,382	100	47,385
Total ..	29	21,147	12	1,164	51	32,241	170	66,252	152	51,607	391	226,502
Central Circle.												
Bellary	26	7,651	..	..	..	..	48	11,329	48	7,224	134	(a) 26,141
Anantapur	21	6,225	..	..	9	1,341	35	7,791	27	2,083	67	10,018
Guntur	..	..	..	..	..	..	11	101	..	..	11	(a) 101
Cuddapah, West ...	46	11,886	5	847	15	8,594	72	23,623	5	2,070	101	59,807
Do. East ..	79	22,419	..	..	6	2,525	97	35,750	38	11,791	170	75,848
Nellore	..	..	..	..	..	..	2	63	3	224	10	617
Chingleput	..	..	..	..	..	..	..	..	2	357	2	357
Chittoor	12	898	1	75	3	140	22	1,941	12	201	41	4,843
Total ..	184	49,079	6	922	33	12,600	287	80,598	135	23,950	536	177,732
Southern Circle.												
North Vellore	11	819	..	..	..	..	12	837	20	1,189	35	2,217
South do.	23	1,087	1	70	..	..	28	1,254	14	461	42	1,715
South Arcot	..	..	..	..	1	..	1	..	3	9	4	9
North Salem	..	..	..	..	1	3	5	938	38	3,964	43	4,902
South do.	1	16	..	..	..	..	1	16	22	673	23	689
Trichinopoly	..	..	..	..	1	5	10	146	..	..	10	146
Madura	3	305	1	150	10	572	16	1,462	27	911	63	3,606
Tinnevelly	10	4,046	3	87	2	1,565	25	7,018	6	201	38	7,431
Total ..	48	6,273	5	307	15	2,145	98	11,671	130	7,408	258	20,715
Western Circle.												
South Canara	8	91	7	172	1	1	58	875	22	600	115	1,806
Malabar, North ..	..	..	..	..	..	..	..	..	..	..	2	49
† Do. South	..	..	..	..	..	..	1	100	1	10	2	110
† The Nilgiris	..	..	..	..	..	..	11	479	..	..	12	485
Kollegal	2	1,160	5	5,720	8	2,451	15	9,331	..	..	16	10,358
Coimbatore, North ..	..	..	..	..	..	..	13	807	13	8,260	30	9,081
Do. Central ..	..	..	1	7	1	7	6	49	3	75	13	258
Do. South ..	3	29	1	6,400	1	1	15	6,906	1	200	18	7,177
Total ..	13	1,280	14	12,299	11	2,460	119	18,547	40	9,145	208	29,324
Grand total ..	274	77,779	37	14,692	110	49,446	674	177,068	457	92,110	1,393	454,273
Grand total for 1913–14.	211	48,445	33	21,199	97	67,482	724	219,210	762	253,976	1,750	716,280

* To facilitate collection of bassia flowers.
† Includes the number of fires in the areas not under special protection.
(a) Includes 20,859 and 49 acres, respectively, burnt in unprotected blocks.

APPENDIX B.—Comparative statement of impounded cattle (1914–15).

District.	Number of cattle impounded.		Average for three years ending 1914–15.
	1913–14.	1914–15.	
Northern Circle.			
Ganjam	852	1,160	1,395
Vizagapatam	1,194	1,057	1,039
Gōdāvari Upper	386	293	311
Do. Lower	797	1,167	1,069
Kistna	2,729	3,452	3,301
Kurnool, East	9,937	8,962	7,703
Do. South	3,049	5,332	3,454
Do. West	15,037	11,600	12,523
Total ..	33,981	33,023	30,795
Central Circle.			
Bellary	13,797	13,770	15,514
Anantapur	9,859	10,376	10,348
Guntūr	19,536	28,178	24,851
Cuddapah West	11,872	8,800	9,017
Do East	5,631	5,569	5,626
Nellore	17,725	15,178	17,272
Chingleput	4,694	8,322	5,746
Chittoor	9,523	8,983	8,936
Total ..	92,637	99,176	97,310
Southern Circle.			
North Vellore	7,331	7,989	8,260
South do.	4,613	7,884	6,559
South Arcot	15,820	24,650	18,526
North Salem	4,873	4,418	4,574
South do.	3,847	6,708	3,546
Trichinopoly	* 9,182	5,561	7,261
Madura	5,834	7,318	6,917
Tinnevelly	3,663	2,328	2,666
Total ..	55,163	66,856	58,309
Western Circle.			
South Canara	609	747	895
Malabar, North	30	82	128
Do. South	81	83	152
The Nilgiris	378	959	490
Kollegal	3,388	3,031	3,357
Coimbatore, North	2,061	2,437	3,568
Do. Central	987	1,411	1,924
Do. South	11,399	588	996
Total ..	8,933	9,338	11,510
Grand Total ..	190,714	208,393	197,924

* Revised figure furnished by the Collector.

ANNUAL FORM No. 65.

Forest Department, Madras Presidency.

AREA of reserved forests and reserved lands during 1914–15.

District.	Area of reserved forests.					
	Area on 1st July 1914.		Added during the year.	Excluded during the year.	Area on 30th June 1915.	
	Acres.	Equivalent in square miles.	Acres.	Acres.	Acres	Equivalent in square miles.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Northern Circle.						
Ganjām	364,132	569	..	..	364,132	569
Vizagapatam	193,832	303	5,181	..	199,013	311
Godāvari, Upper	273,751	428	..	..	273,751	428
Do. Lower	258,276	404	..	..	258,276	404
Kistna	177,328	277	3,284	7,229	173,383	271
Kurnool, East	640,302	1,000	..	..	640,302	1,000
Do. South	490,439	766	68	42	490,465	766
Do. West	555,071	867	..	..	555,071	867
Total ..	2,953,131	4,614	8,533	7,271	2,954,393	4,616
Central Circle.						
Bellary	401,361	627	23	(*h*) 4,940	396,444	619
Anantapur	475,321	743	..	..	475,321	743
Guntūr	521,247	814	..	..	521,247	814
Cuddapah, West	470,073	734	..	..	470,073	734
Do. East	693,364	1,083	107	..	693,471	1,084
Nellore	472,091	738	(*g*) 4,397	(*i*) 10,002	466,396	729
Chingleput	133,973	209	10	529	133,454	209
Chittoor	537,155	840	21	706	536,470	838
Total ..	3,704,495	5,788	4,558	16,177	3,692,876	5,770
Southern Circle.						
North Vellore	313,063 (*a*) — 7 (*b*)+ 2,118	489 (*b*) + 3	1	1,046	314,129	491
South do.	457,783 (*b*)— 2,118	715 (*b*) — 3	..	(*d*) 72	455,593	712
South Arcot	215,796	337	..	972	214,824	336
North Salem	507,374	792	..	..	507,374	792
South do.	371,762	581	..	81	371,681	581
Trichinopoly *cum* Tanjore	226,994 (*c*)+ 104	355	..	..	227,098	355
Madura	422,888	661	16 (*e*) 112	155 (*e*) 2,026	420,835	657
Tinnevelly *cum* Rāmnād	274,300	429	..	(*f*) 2	274,298	429
Total ..	2,789,960 + 97	4,359	129	4,354	2,785,832	4,353
Western Circle.						
South Canara	510,590	798	251	95	510,746	798
Malabar, North	167,785	262	313	..	168,098	263
Do. South	69,405	108	22,120	..	91,525	143
The Nilgiris	303,984	475	..	65	303,919	475
Kollegal	467,166	730	79	33	467,212	730
Coimbatore, North	589,951	922	27	..	589,978	922
Do. Central	225,932	353	8 (*g*) 23	..	225,963	353
Do. South	290,652	454	..	..	290,652	454
Total ..	2,625,465	4,102	22,821	(*h*) 193	2,648,093	4,138
Grand total ..	12,073,148	18,863	36,041	27,995	12,081,194	18,877

(*a*) Represents area disafforested in 1911 and omitted to be shown in previous returns.
(*b*) ,, transfer from South to North Vellore.
(*c*) Correct figures furnished by the Collector.
(*d*) Deducted as per actual area found on demarcation of a reserve.
(*e*) On account of recomputation of areas investigated by the Special Deputy Collector.
(*f*) Area already included under reserve now transferred for re-settlement.
(*g*) Recomputation of areas.
(*h*) Disafforested.
(*i*) 8,610 acres (13 square miles) by correct computation of areas and 1,392 acres (2 square miles) by disafforestation.

Area of reserved forests and reserved lands during 1914–15—*cont.*

District.	Area of reserved lands.						Total area of reserved forests and reserved lands in square miles.
	Area on 1st July 1914.		Added during the year.	Excluded during the year.	Area on 30th June 1915.		
	Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Northern Circle.							
Ganjām	44,480	70	..	..	44,480	70	639
Vizagapatam	6,727	(*b*) 10	385	5,400	1,712	(*b*) 8	314
Gōdāvari, Upper	226,489	354	..	..	226,489	354	782
Do. Lower	47,955	75	..	..	47,955	75	479
Kistna	..	..	..	..	..	..	271
Kurnool, East	..	..	..	..	..	..	1,000
Do. South	69	(*a*) ..	..	69	..	..	766
Do. West	..	..	..	..	..	..	867
Total ..	325,720	509	385	5,469	320,636	502	5,118
Central Circle.							
Bellary	40,023	63	..	23	40,000	63	682
Anantapur	6,578	10	..	..	6,578	10	753
Guntūr	..	..	..	..	..	..	814
Cuddapah, West	..	..	..	..	..	..	734
Do. East	107	..	158	107	158	..	1,084
Nellore	..	..	..	..	..	..	729
Chingleput	19	..	..	10	9	..	209
Chittoor	21	..	42	21	42	..	838
Total ..	46,748	73	200	161	46,787	73	5,843
Southern Circle.							
North Vellore	73	..	..	1	72	..	491
South do.	27	..	..	..	27	..	712
South Arcot	..	..	..	..	..	..	336
North Salem	29,290	46	..	..	29,290	46	838
South do.	11,620	18	..	..	11,620	18	599
Trichinopoly *cum* Tanjore	4,610	7	1,159	..	5,769	9	364
Madura	20	..	6	16	10	..	657
Tinnevelly *cum* Rāmnād	72	..	2	..	74	..	429
Total ..	45,712	71	1,167	17	46,862	73	4,426
Western Circle.							
South Canara	346	1	5	251	100	..	798
Malabar, North	313	..	..	313	..	..	263
Do. South	34,925	55	..	22,120	12,805	20	163
The Nilgiris	49,590	77	242	..	49,832	78	558
	* 2,918	5	..	..	2,918	5	
Kollegal	489	1	33	79	443	1	731
Coimbatore, North	129	..	127	27	229	..	922
Do. Central	6,402	10	56	8	6,450	10	363
Do. South	142	..	..	..	142	..	454
Total ..	95,254	149	463	(*c*)22,798	72,919	114	4,252
Grand Total ..	513,434	802	2,215	28,445	487,204	762	19,639

* Toda patta lands.

(*a*) Less than half a square mile.

(*b*) Includes 2·05 square miles of Karakavalasa leased forests and its east and west blocks.

(*c*) Transferred to reserved forests.

ANNUAL

Forest Department,

STATEMENT showing the progress made in, and the

Name of forest district.	Area already settled at commencement of year.	Areas finally settled during the year.					
		Number and date of Government Order according final sanction to the settlement.	Name of forest settled.	Area in square miles.	Expenditure incurred during the year on areas finally settled.		Entire cost per square mile of areas finally settled during the year.
					In forest accounts.	In other accounts.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
							Northern
	SQ. MLS.			SQ. MLS.	RS.	RS.	RS.
Ganjām ..	569	....	....	..	..	..	..
Vizagapatam	303	G.O. No. 550, Revenue, dated 1st March 1915.	Sarugudu block VI	(*a*) 8·09	..	..	..
Gōdāvari, Upper.	428	....	....	..	..	..	..
Gōdāvari, Lower.	404	....	....	..	..	..	..
Kistna ..	(*b*) 271	....	....	..	..	..	..
Kurnool, East.	1,000	....	....	..	..	..	..
Kurnool, South.	766	G.O. No. 848, Revenue, dated 9th April 1915.	South Veligonda extension II.	0·10	..	..	..
		G.O. No. 298, Revenue, dated 3rd February 1915.	Pyapalli addition I	0·005	..	..	..
Kurnool, West.	867	....	....	..	..	.	..
Total ..	4,608			8·195	..	..	..
							Central
Bellary ..	619	G.O. No. 1559, Revenue, dated 28th May 1914.	Enclosure to Neraniki reserve.	0·04	..	..	..
Anantapur..	743	....	....	..	..	..	..
Guntūr ..	814	....	....	..	..	..	..
		....	....	..	..	..	..
Cuddapah, West.	734	....	....	..	..	..	..
Cuddapah, East.	1,084	G.O. No. 2626, Revenue, dated 11th September 1914.	Sancherla extension C ..	0·167	..	..	..
	..	....	....	..	..	..	..

NOTE.—This estimate will include all reserved lands under section 26 and unreserved lands.

(*a*) 0·34 square miles of area given in excess in previous year excluded at settlement.

(*b*) Difference of 6 square miles is due to—

(1) Disafforestation—11·29.

(2) Rectification of boundaries + 5·13.

FORM No. 66.

Madras Presidency, Northern Circle.

expenditure incurred on, Forest Settlements during 1914–15.

Areas undergoing settlement.						Estimate of areas in which settlement operations have not yet commenced.
At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing settlement.		
Name of tract. (9)	Area in square miles. (10)	Name of tract. (11)	Area in square miles. (12)	In forest accounts. (13)	In other accounts. (14)	(15)
Circle.						
	SQ. MLS.		SQ. MLS.	RS.	RS.	SQ. MLS.
Chokkapad	69·50	....	..	..	..	..
....	..	Busilkota and Rayipalem ..	0·60	..	..	..
Pedamidisileru	96·48	....	..	..	..	..
Pedakonda extension I ..	1·23	....	..	..	..	..
Tulluvada extension V ..	0·50	....	..	..	..	..
Enakuru extension II ..	0·50	....	..	..	..	..
Nugur block	246·61	....	..	..	..	..
Marrigura reserve, Busipakala enclosure.	1·88	....	..	..	..	..
Valsugri reserve, Korrajulagudem extension I.	1·93	....	..	..	..	..
Gummadakonda extension III to the Rekapalli hill reserve.	2·40	....	..	..	..	..
Dhanukonda extension IV to the Rekapalli hill reserve.	1·53	....	..	..	..	..
Kansulur reserve, Vandalurgondi extension I.	0·82	....	..	..	..	..
Coringa extension	75	....	..	..	..	..
....	..	....	..	..	..	..
....	..	....	..	..	..	..
....	..	....	..	..	..	..
....	..	....	..	..	..	..
....	..	....	..	..	..	..
	498·38	....	0·60	..	..	..
Circle.						
....	..	....	..	..	..	..
Yerrakonda extension No. II.	9·80	Addition to Amagondapalyam reserve.	0·02	..	..	..
Bhadrapur extension	0·56	Addition to Peddoddi reserve.	0·09	..	..	..
....	..	....	..	..	..	..
....	..	Faridpenta enclosure to Palakondas.	0·024	..	..	180
....	..	Thummalabylu	0·116	..	..	..
....	..	Palakondas	0·13	..	..	..

Statement showing the progress made in, and the expenditure-

Name of forest district.	Area already settled at commencement of year.	Areas finally settled during the year.					
		Number and date of Government Order according final sanction to the settlement.	Name of forest settled.	Area in square miles.	Expenditure incurred during the year on areas finally settled.		Entire cost per square mile of areas finally settled during the year.
					In forest accounts.	In other accounts.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
							Central
	SQ. MLS.			SQ. MLS.	RS.	RS	RS.
Nellore ..	729	....	....	..	..	..	..
Chingleput.	209	G.O. No. 376, Revenue, dated 9th February 1915.	Perungoli extension No. II. ..	0·020	..	..	..
Chittoor ..	838	G O. No. 2436, Revenue, dated 22nd August 1914.	Addition to Bommasamudram C.	·025	..	..	..
		G.O. No. 3101, Revenue, dated 29th October 1914.	Addition to Whiteside's garden.	·004	..	..	..
		G.O. No. 651, Revenue, dated 11th March 1915.	Addition to Marella and its extension.	·004	..	..	..
Total ..	5,770			0·260	..	..	..
							Southern
Vellore, North.	489 (*a*) + 3 (*b*) — 1	G.O. No. 3003, Rev., dated 15th October 1914.	Panamadangi reserve, Survey No. 18 of Vandrantangal village.	0·0020	..	..	..
Vellore, South.	715 (*a*)— 3	....	....	..	..	..	..
Arcot, South.	337 (*b*)— 1	....	....	..	..	..	..
Salem, North.	792	....	....	..	..	..	..
Salem, South.	581	....	....	..	..	..	..
Trichinopoly *cum* Tanjore.	355	....	....	..	..	..	..
Madura ..	661 (*c*)— 4	G.O. No. 375, Rev., dated 9th February 1915.	Addition to Adukkam ..	0·0007	..	..	..
		G.O. No. 2239, Rev., dated 4th August 1914.	Southern slopes	0·0137	47	..	..
		G.O. No. 2435, Rev., dated 22nd August 1914.	Kokkuparai	0·0118	..	..	..
Tinnevelly *cum* Ramnad.	429	....	....	..	..	..	..
Total ..	4,359 — 6			0·0282	47	..	..
Grand Total.	4,353			0·0282	47	..	..

(*a*) Transfer from South to North Vellore.
(*b*) Disafforested area deducted.
(*c*) Excluded on account of areas investigated by the Special Deputy Collector and disafforested.

incurred on, forest settlements during 1914-15—*cont.*

Areas undergoing settlement.						
At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing settlement.		Estimate of areas in which settlement operations have not yet commenced.
Name of tract. (9)	Area in square miles. (10)	Name of tract. (11)	Area in square miles. (12)	In forest accounts. (13)	In other accounts. (14)	(15)
Circle—cont.						
				RS.	RS.	SQ. MLS.
.... .. Nandambakkam extension No. II.	0·01	....	.. ..	.. ..	.. ..	.. ..
....	..	Addition to Gundlur reserve ..	0·015	..	..	..
....	..	Addition to Ankalammakonda	·05	..	..	..
.... ..	..	....	..	..	..	..
	10·37		0·445	..	..	180
Circle.						
Sholavandan reserve	0·0281	....	..	..	..	..
Karapattu extension	0·0844	....	..	..	..	..
Singarapet extension, Survey Nos. 129 and 130 of Sembarai village.	0·0344	....	..	..	..	..
Andiappanur reserve, Survey Nos. 260 and 261 of Andiappanur village.	0·0062	....		..	..	..
.. ..	..	....	..	..	..	.
Hudaiadurgam	46	....	..	..	..	..
Arana	3	....	..	..	..	..
Tirthagiri	3	....	..	..	..	..
Jarugamalai	12·230	....	..	..	..	..
Vengur padugais	1·000	Ariyur shola	1·8100	..	..	..
Palamalai extension	1·390	....	..	..	..	..
V. Kanapadi extension ..	1·000	....	..	..	..	..
Gundur extension	3·850	....	..	..	..	(*d*) 8·73
Southern slopes	0·0062	Adukkam	0·0082	..	..	..
....	..	Pambar	0·0014	..	..	..
....	..	....	..	..	..	..
Mailodai and Tirukuttuchala-parvathan estates.	0·114	Srivilliputtur ghat forest ..	0·0027	..	..	..
	71·7433		1·8223	..	..	8·73
	71·7433		1·8223	.	..	8·73

(*d*) Difference abandoned.

Statement showing the progress made in, and the Expenditure

Name of forest district.	Area already settled at commencement of year.	Areas finally settled during the year.					
		Number and date of Government Order according final sanction to the settlement.	Name of forest settled.	Area in square miles.	Expenditure incurred during the year on areas finally settled.		Entire cost per square mile of areas finally settled during the year.
					In forest accounts.	In other accounts.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
							Western
	SQ. MLS.				RS.	RS.	RS.
South Canara.	798	G.O. No. 2672, dated 16th Sept. 1914.	Mudugalpare extension No. I.	·02	..	..	..
		Do.	Naravi extension No. VI ..	·04	..	..	..
		G.O. No. 3224, dated 10th Nov. 1914.	Ballimane extension No. III.	·32	..	..	..
		G.O. No. 762, dated 26th March 1915.	Tombettu extension No. II ..	·02	..	..	..
Total ..	798			·40	..	..	..
Malabar, North.	262	G.O. No. 2482, dated 27th August 1914.	Chammatti malai estate (Hilldale addition).	·32	..	..	..
		G.O. No. 2483, dated 27th August 1914.	Mangalad estate (Peria addition).	·13	..	.	..
Total ..	262			·45	..	..	..
Malabar, South.	108	G.O. No. 1438, dated 18th May 1914.	Silent Valley	35	..	..	..
The Nilgiris.	475	.. .	....	..	..	..	..
Total ..	475			..	..	..	..
Kollegal ..	730	G.O. No. 652, Rev., dated 11th March 1915.	Addition to Doddasampagai extension first bit.	·009	..	..	..
.	..	G.O. No. 379, Rev., dated 9th February 1915.	Chikkailuru extension No. I.	·091	..	..	..
..	..	G.O. No. 761, Rev., dated 26th March 1915.	Cowdalli addition No. I ..	·023	..	..	..
Total ..	730			·123	..	..	..
Coimbatore, North.	922	G.O. No. 2548, Rev., dated 2nd September 1914.	South Bargur addition ..	·042	..	..	..
Total.	922			·042	..	..	..
Coimbatore, Central.	353	G.O. No. 374, Rev., dated 9th February 1915.	Survey Nos. 397 and 402 of Sujjalatti village in Modur reserve.	·01	88	..	..
Total ..	353			·01	88	..	..
Coimbatore, South.	454	....	....	..	..	..	..
Total ..	454			..	..	..	..
Grand total.	4,102			36·02 or 36	88	..	..

incurred on, Forest Settlements during 1914–15—*cont.*

Areas undergoing settlement.						Estimate of areas in which settlement operations have not yet commenced.
At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing settlement.		
Name of tract.	Area in square miles.	Name of tract.	Area in square miles.	In forest accounts.	In other accounts.	
(9)	(10)	(11)	(12)	(13)	(14)	(15)
Circle.						
				RS.	RS.	SQ. MLS.
Aletti addition No. I ..	·006	Subramanya extension No. I ..	·007	..	..	..
Madibare extension No. I ..	·140	....	..	..	..	..
Do. No. II..						
....	..	....	..	..	..	..
....	..	....	..	..	..	..
	·146		·007	..	..	..
....	..	....	..	..	..	..
....	..	....	..	..	..	..
	..	....	..	..	..	..
....	..	....	..	..	..	..
....	..	Snowdon addition	·008	..	..	..
		Benne addition No. III ..	·135	..	..	..
		Do. No. IV ..	·098	..	..	..
		Ammankaval addition No. IV.	·027	..	..	..
		Cherambadi addition No. V ..	·047	..	..	..
		Kalmalai addition	·064	..	..	..
			·379	..	..	..
Hanur addition A	·023	Chikkailuru extension Nos. 3 and 4.	·051	1,202	..	1
Do. B	·001	....	..	..	..	..
Do. C	·006	....	..	..	..	..
Yedaralli addition No. 1 ..	·036	....	..	..	..	..
Do. No. 2 ..	·253	....	..	..	..	..
Do. No. 3 ..	·016	....	..	..	..	..
Do. No. 4 ..	·003	....	..	..	..	..
Do. No. 5 ..	·030	....	..	..	..	..
Do. No. 6 ..	·160	....	..	..	..	..
Chikkailuru extension No. 2.	·006	....	..	..	..	..
Chikkailur addition No. I ..	·103	....	..	..	..	..
	·637		·051	1,202	..	1
Enclosures in South Bargur reserve and its additions.	·160	Enclosures in North Bargur reserve and its additions.	·198	..	..	..
	·16		·198	..	..	..
Anaikattu block, North ..	1·760	Thadagam additions Nos. 2 to 21	·087	199	..	..
Do. South ..	7·360	....	..	..	..	..
Survey Nos. 93A and 93B of Kummarampalayam (enclosures in Gopinari reserve).	·0060	..	..	..	..	..
Sundapatti additions Nos. 2 to 20.	·800	....	..	..	..	..
Addition to Thadagam block No. IV.	·060	....	..	..	..	..
	9·986		·087	199	..	..
Additions to Anamalai reserve.	·08	....	..	2,850	..	..
Additions to Punachi reserve No. II.	·14	....	..	..	..	..
	·22		..	2,850	..	..
	11·14		·72	4,251	..	1

ANNUAL FORM No. 67.

Forest Department, Madras Presidency.

RECORD of demarcation and maintenance of boundaries.

District.	Length of boundaries artificially demarcated during the year.	Length of previously existing boundaries repaired.	Length of previously existing boundaries not repaired.	Total length of artificially marked boundaries at the close of the year.	Length of boundaries still to be demarcated at the close of year.	Length of natural boundaries not requiring artificial marks.	Total length of boundaries at the close of the year.	Expenditure on demarcation during the year.	
								On new work.	On repairs.
Northern Circle.	MILES.	MILES.	MILES.	MILES.	MILES.	MILES.	MILES.	RS.	RS.
Ganjam	(*b*) & (*n*) 107	(*a*) 1,094 (*o*) 36	(*p*) 127	(*q*) 1,364	4	(*r*) 80	(*b*) & (*s*) 1,448	(*t*) 2,450	170
Vizagapatam	..	(*a*) 530 10	..	540	..	..	540	..	247
Gōdāvari, Upper ..	..	425	..	425	..	143	568	..	899
Do. Lower ..	..	(*a*) 748 26	10	784	..	52	836	..	(*o*) 929
Kistna	..	(*a*) 201 60	308	569	..	41	(*f*) 610	..	316
Kurnool, East ..	..	(*a*) 579 108	16	703	..	48	751	..	(*d*) 210
Do. South ..	..	(*a*) 25 576	28	629	..	5	634	..	284
Do. West ..	..	(*a*) 688 56	186	930	..	100	1,030	..	(*e*) 220
Total ..	107	(*a*) 3,865 1,297	675	5,944	4	469	6,417	2,450	3,275
Central Circle.									
Bellary	16	..	1,730	1,746	6	..	1,752	830	(*g*) 591
Anantapur	..	56	1,769	1,825	..	..	1,825	..	1,830
Guntūr	..	111	1,281	1,392	..		1,392	..	937
Cuddapah, West ..	..	27 (*a*) 540	811	1,378	..	29	1,407	..	(*h*) 678
Do. East ..	..	97 (*a*) 485	333	915	..	46	961	..	2,520
Nellore	..	1,794	275	2,069	..	84	2,153	..	1,792
Chingleput	..	188 (*a*) 716	..	904	..	..	904	..	1,314
Chittoor	..	1,466	4	1,470	..	50	1,520	..	2,711
Total ..	16	3,739 (*a*) 1,741	6,203	11,699	6	209	11,914	830	12,373
Southern Circle.									
North Vellore ..	..	(*a*) 1,139	..	1,139	..	7	(*i*) 1,146	..	9
South do. ..	..	(*a*) 1,118 28	..	1,146	..	22	(*j*) 1,168	..	212
South Arcot	..	1,152	..	1,152	..	..	(*k*) 1,152	..	107
North Salem	7	(*a*) 1,016	306	1,329	..	40	1,369	325	123
South do.	..	(*a*) 892 239	12	1,143	..	5	1,148	..	959
Trichinopoly *cum* Tanjore.	..	(*a*) 936 65	91	1,092	11	24	(*l*) 1,127	..	605
Madura	48	(*a*) 998	330	1,376	178	178	1,732	3,405	3
Tinnevelly *cum* Rāmnad.	..	34	470	504	..	14	(*m*) 518	..	781
Total ..	55	1,518 (a) 6,099	1,209	8,881	189	290	9,360	3,730	2,829

(*a*) Cleared by Forest subordinates free of cost.
(*b*) Previous year's figures were incorrect.
(*c*) Excludes Rs. 711 spent for demarcating felled coupes in the Rajahmundry, Polavaram and Gokavaram Ranges.
(*d*) Excludes Rs. 75 spent on altering a portion of the boundary line between Dornal and Morricheruvu ranges.
(*e*) Excludes Rs. 915 spent on cutting the newly-proposed Sivapuram range boundary.
(*f*) The figure in column 8 differs from that of last year as certain reserves were disafforested during the year.
(*g*) Includes Rs. 72 being cost of cutting a twelve feet line around sandal reserve.
(*h*) Includes Rs. 10 spent on cutting and chiselling compartment stones.
(*i*) Difference due to disafforestation of certain reserves and transfer of a reserve from South Vellore.
(*j*) Due to transfer of a reserve to North Vellore and correct demarcation of Kapalur reserve.
(*k*) Difference due to disafforestation of reserves.
(*l*) Revised figures furnished by the District Forest officer.
(*m*) Increase due to addition of 30 miles in 1913-14 and omitted to be shown in that year's return.
(*n*) Excludes 21 miles of boundaries belonging to the Parlakimedi Maliahs.
(*o*) Do. 414 do. do. do.
(*p*) Do. 23 do. do. do.
(*q*) Do. 458 do. do. do.
(*r*) Do. 14 do. do. do.
(*s*) Do. 472 do. do. do.
(*t*) Excludes Rs. 214 spent in Parlakimedi Maliahs.

Record of demarcation and maintenance of boundaries during 1914–15—*cont.*

District.	Length of boundaries artificially demarcated during the year.	Length of previously existing boundaries repaired.	Length of previously existing boundaries not repaired.	Total length of artificially marked boundaries at the close of the year.	Length of boundaries still to be demarcated at the close of the year.	Length of natural boundaries not requiring artificial marks.	Total length of boundaries at the close of the year.	Expenditure on demarcation during the year.	
								On new work.	On repairs.
Western Circle.	MILES.	MILES.	MILES.	MILES.	MILES.	MILES.	MILES.	RS.	RS.
South Canara ..	..	117	3,595 (c) —2	3,710	46	124 (c) —3	3,877	(d) 65	1,343
Malabar, North ..	..	162	1,000	1,162	30	36	1,228	..	55
Do. South ..	..	62 (a) 1	64	131	20	55	206	..	24
The Nilgiris	..	2 (a) 16	1,596 (c) —1	1,613	..	299	1,912	..	96 (e) 15 (f) 189
Kollegal	58	5	102 (c) —1	164	240 (c) —2	87	489	977	148
Coimbatore, North ..	1	75 (a) 306	161	543	28	110	681	(g)103	2,760
Do. Central.	9	47 (a) 254	273	583	13	44	640	125	518 (e) 153
Do. South ..	..	7 (b) 2 (a) 114	91	214	..	52	266	..	84
Total ..	68	479 (a) 695	6,878	8,120	375	804	9,299	1,270	5,385
Grand total ..	246	7,033 (a)12,400	14,965	34 644	574	1,772	36,990	8,280	25,862

(a) Cleared by subordinates free of cost.
(b) Frontier boundaries the cost of demarcating which was debited to "Political."
(c) Length of boundaries of forests disafforested.
(d) Cost of preliminary demarcation.
(e) Cost of clearing compartment and coupe lines.
(f) Expenditure on demarcating the new district boundary.
(g) Includes cost of boundaries demarcated in the previous year.

ANNUAL FORM No. 69.

Forest Department, Madras Presidency.

PROGRESS made in working-plans during 1914–15.

District.	Areas for which working-plans have been completed and approved by the Board.		Areas for which working-plans are being compiled or have been compiled but not sanctioned.		Areas for which working-plans have still to be taken in hand.	Areas for which working-plans are not at present required.	Total forest area as in form No. 65.	Entire cost per square mile of working-plans completed.	Remarks.
	At commencement of the year.	During the year.	At commencement of the year.	Taken in hand during the year.					
Northern Circle.	SQ. MLS.	SQ. MLS.	SQ. MLS	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.		
Ganjām	(*a*) 442	..	..	..	197	..	639	..	
Vizagapatam ..	145	..	28	..	73	68	314	..	
Godāvari, Upper ..	117	62	..	..	603	..	782	..	
Do. Lower ..	24	..	380	..	..	75	479	..	
Kistna	(*b*) 149	..	(*b*) 63	..	..	(*b*) 59	271	..	
Kurnool, East ..	..	..	..	1,000	..	..	1,000	..	
Do. South ..	686	..	80	..	..	..	766	..	
Do. West ..	469	..	..	..	..	398	867	..	
Total ..	2,032	62	551	1,000	873	600	5,118	..	
Central Circle.									
Bellary	..	..	..	..	682	..	682	..	
Anantapur ..	426	..	..	..	327	..	753	..	
Guntūr	8	..	164	..	642	..	814	..	
Cuddapah, West ..	(*c*) 39	..	..	69	626	..	734	..	
Do. East ..	103	56	..	38	887	..	1,084	..	
Nellore	58	130	..	13	528	..	729	..	
Chingleput ..	209	..	..	..	.	..	209	..	
Chittoor	791	..	..	..	47	..	838	..	
Total ..	1,634	186	164	120	3,739	..	5,843	..	
Southern Circle.									
Vellore, North	487 + 1 (*d*) + 3 (*e*)	..	..	..	(*d*)	..	491	..	
Do. South	591 + 52 (*f*) − 3 (*g*)	60	12	..	..	..	712	..	
Arcot, South ..	155	..	122	..	17	42	(*g*) 336	..	
Salem, North ..	161	..	677	..	..	..	838	..	
Do. South ..	452	17	110	..	18	2	599	..	
Trichinopoly *cum* Tanjore.	205 (*h*) −1	..	39	..	(*i*) 120	1	364	..	
Madura	356	..	..	..	(*j*) 301	.	657	..	
Tinnevelly *cum* Rāmnād.	246	..	..	..	9	174	429	..	
Total ..	2,705	77	960	..	465	219	4,426	..	

(*a*) Working-plan for 20 square miles of Mohiri hills was revised during 1914–15.

(*b*) Excludes the area of certain reserves disafforested during the year.

(*c*) Reduction due to cancellation of working plans.

(*d*) Of the 2 square miles shown in column 6 last year 1 square mile was disafforested and 1 square mile transferred to column 2 in rounding off figures.

(*e*) Represents transfer from South to North Vellore.

(*f*) Transferred from column 6 of last year as this area of sandalwood plan under revision is covered by working-plan for other produce.

(*g*) Difference of 1 square mile due to disafforestation; alterations in other columns are revised figures based on classification of forests.

(*h*) Omitted to be deducted in the last year on account of area disafforested.

(*i*) Two square miles added during the year and 2 square miles transferred from column 7.

(*j*) Difference due to recomputation of areas by Special Deputy Collector and disafforestation.

Progress made in working-plans during 1914-15—*cont.*

District.	Areas for which working-plans have been completed and approved by the Board.		Areas for which working-plans are being compiled or have been compiled but not sanctioned.		Areas for which working-plans have still to be taken in hand.	Areas for which working-plans are not at present required.	Total forest area, as in form No. 65.	Entire cost per square mile of working-plans completed.
	At commencement of the year.	During the year.	At commencement of the year.	Taken in hand during the year.				
				Reserved forests.				
Western Circle.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	
South Canara	589	..	2	49	158	..	798	..
Malabar, North	178	..	53	..	32	..	263	..
Do. South	7	..	..	..	95	37	139	..
The Nilgiris	103	(*a*) 4	..	..	368	..	475	..
Kollegal	53	..	22	..	160	495	730	..
Coimbatore, North ..	289	..	..	..	633	..	922	..
Do. Central ..	220	..	..	..	54	79	353	..
Do. South ..	75	..	..	..	35	317	427	..
Total ..	1,514	4	77	49	1,535	928	4,107	..
				Reserved lands.				
South Canara	..	..	..	..	*	..	*	..
The Nilgiris	..	..	..	..	1	6	7	..
Kollegal	..	..	..	..	..	1	1	..
Coimbatore, North ..	..	..	..	..	*	..	*	..
Do. Central ..	..	..	..	..	10	..	10	..
Do. South ..	..	..	..	..	*	..	*	..
Total ..	..	..	..	..	11	7	18	..
				Leased forests.				
Malabar, South	24	..	..	..	..	..	24	..
The Nilgiris	76	..	..	..	..	..	76	..
Coimbatore, South ..	..	..	..	..	27	..	27	..
Total ..	100	..	..	..	27	..	127	..
Grand total ..	1,614	4	77	49	1,573	935	4,252	..
Grand total, Presidency.	7,985	329	1,752	1,169	6,650	1,754	19,639	..

* Less than one square mile.

(*a*) The difference between this and the area shown in column 4 of last year's return is due to adoption of correct area.

ANNUAL FORM No. 70.

Forest Department, Madras Presidency.

COMMUNICATIONS and Buildings, 1914–15.

District.	Roads (including bridle-paths and culverts).				Buildings.		Other works.	
	New works.		Repairs.		Cost of new works.	Cost of repairs.	Cost of new works.	Cost of repairs.
	Length.	Cost.	Length.	Cost.				
Northern Circle.	M. F. CH.	RS.	M. F. CH.	RS.	RS.	RS.	RS.	RS.
Direction	.. ..	..	.. ..	..	(b) 19	..	..	..
Ganjam	3 6 0	3,771	50 4 0	590 (a) 595	(d) 1,968	(e) 3,096 (a) 1,710	327	1
Vizagapatam ..	..	..	12 5 0	121	164	773 (a) 597	26	19
Gōdāvari, Upper ..	104 $7\frac{9}{10}$ 0	2,601	48 2 0	252	1,037	4,055	871	..
Do. Lower ..	11 0 0	397	82 0 0	2,404	2,700	2,075 (a) 694	45	41
Kistna	10 4 0	2,277	11 6 0	183	161	471	..	151
Kurnool, East ..	60 0 0	2,542	187 0 0	7,962	3,900	785 (a) 812	556	381
Do. South ..	11 $4\frac{7}{10}$ 0	729	50 2 0	7,215	1,943	1,148	139	371
Do. West ..	13 $6\frac{1}{2}$ 0	320	30 3 0	374	1,337	1,347 (a) 424	168	..
Total ..	215 5 $\frac{1}{10}$	12,637	472 6 0	19,696	13,229	17,987	2,132	964
Central Circle.								
Bellary	..	..	14 4 $7\frac{1}{2}$	795	506	1,160	40	119
			Add cost of establishment.			8		
Anantapur	0 1 0	65	15 7 0	896	4,318	1,005	869	411
	Add cost of establishment			313	..	915		
						* + 3		
Guntūr	..	..	4 0 0	39	705	402	..	76
			Add cost of establishment.			* + 864		
Cuddapah, West ..	..	..	10 0 0	308	1,599	488	..	..
			Add cost of establishment			663		
						* — 1		
Do. East ..	51 3 $5\frac{1}{2}$	5,899	79 4 3	1,947 * — 92	12,268	682 * — 1	54	253
			Add cost of establishment.			432		
Nellore	19 6 0	1,663 * + 6	..	..	2,162	658 * + 584	454 * — 42	1
Chingleput	..	..	13 4 0	1,272	939	930 * — 1	..	54
Chittoor	13 2 6	2,348	19 4 0	211	325	602 * — 1	350	35 + 1
			Add cost of establishment.			1,306		
Total ..	84 5 $1\frac{1}{2}$	9 981	157 0 $\frac{1}{2}$	5,689	22,822	10,688	1,725	950
Southern Circle.								
Vellore, North ..	5 0 0	1,123	36 0 0	2,494	2,549	620 + (c) 222	45	122
Do. South ..	4 0 0	622	35 0 0	3,518	2,463	1,782 + (c) 548	460	66
Arcot, South	7 0 0	429	..		1,333	211 + (c) 275	80	..
Salem, North ..	8 0 0	992	124 0 0	1,894	4,369	932 + (c) 217	414	298
Do. South ..	22 0 0	2,961	29 0 0	2,371	7,359	736 + (c) 585	460	45
Trichinopoly ..	..	..	124 0 0	2,792	4,325	816 + (c) 663	..	80
Madura	3 0 0	106	145 0 0	8,258	3,941	1,114 + (c) 1,061	863	..
Tinnevelly	..	..	93 0 0	2,353	5,638	1,318	437	445
Total ..	49 0 0	6,233	586 0 0	23,680	32,477	11,100	2,759	1,056

* Variations as per audited figures.

(a) Establishment charges. (b) Wrongly adjusted to buildings. (c) Represents pay of establishment.
(d) Excludes Rs. 325 spent in building a combined range office and quarters in the Parlākimedi Maliahs.
(e) Excludes Rs 63 spent on repairs in the Parlākimedi Maliahs.

Communications and Buildings, 1914-15—*cont.*

District.	Roads (including bridle-paths and culverts).				Buildings.		Other works.	
	New works.		Repairs.		Cost of new works.	Cost of repairs.	Cost of new works.	Cost of repairs.
	Length.	Cost.	Length.	Cost.				
Western Circle.	M. F.	Rs.	M. F.	Rs.	Rs.	Rs.	Rs.	Rs.
South Canara	8 6	1,563	20 6	1,342	4,315	263 * 200	657	16
Malabar, North	20 6	1,685	90 1	3,631	2,088	3,352 * 562	1,756	440
Do. South	6 0	407	74 1	3,120	5,216	1,436	1,089	152
The Nilgiris	13 0	7,880	48 4	2,100	914	1,857	820	15
Kollegal	26 4	1,652	37 0	1,387 * 192	1,684	499 * 338	1,072	..
Coimbatore, North ..	9 0	7,411	43 0	3,394	9,483	296 * 474	1,023	880
Do. Central .	(*a*) 6 0	92	38 0	2,865	2,344	600 * 38 † — 45	..	134
Do. South ..	8 5	4,465	27 6	3,829 * 288	4,755	980 * 315	30	97
Direction	..	..	..	..	..	2	..	..
Total ..	98 5	25,155	379 2	22,148	30,799	10,667	6,447	1,734
Grand total, Presidency.	448	54,006	1,595	71,213	99,327	50,442	13,063	4,704

* Cost of establishment. † Cash recovery of service payments.

(*a*) Length of a new road traced.

ANNUAL

Forest Department,

REGISTER of Breaches of

District.		Cases pending from 1913–14.	New cases of the year.					Total cases.
			Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)
								NORTHERN
Ganjam	A	(*a*) 10	1	48	5	1	55	65
	B	(*a*) 67	..	335	37	2	374	441
	C	..	92	30	..	..	122	..
	Total ..	(*b*) 77	(*c*) 93	(*d*) 413	(*e*) 42	(*f*) 3	(*g*) 551	(*h*) 506
Vizagapatam ..	A	(*a*) 12	2	57	4	14	77	89
	B	(*a*) 33	..	207	47	19	273	306
	C	..	24	1	..	..	25	..
	Total ..	45	26	265	51	33	375	395
Gōdāvari, Upper.	A	..	..	..	..	..	..	..
	B	22	..	53	8	11	72	94
	C	..	30	..	..	..	30	..
	Total ..	22	30	53	8	11	102	94
Gōdāvari, Lower.	A	(*a*) 34	2	33	11	7	53	87
	B	(*a*) 69	4	152	58	46	260	329
	C	..	..	1	..	..	1	..
	Total ..	103	6	186	69	53	314	416
Kistna	A	(*a*) 22	2	36	51	3	92	114
	B	(*a*) 52	..	186	100	6	292	344
	C	..	..	8	16	..	24	..
	Total ..	74	2	230	167	9	408	458
Kurnool, East ..	A	23	..	15	24	5	44	67
	B	46	..	213	161	10	384	430
	C	..	..	17	1	..	18	..
	Total ..	69	..	245	186	15	446	497
Kurnool, South..	A	(*a*) 61	1	115	37	16	169	230
	B	(*a*) 37	1	234	121	22	378	415
	C	..	42	71	7	2	122	..
	Total ..	98	44	420	165	40	669	645

A = Cases taken into Court.
B = Cases compounded by the District Forest Officer or Revenue Divisional Officer.
C = Cases undetected.

(*a*) The variations between the closing balances of 1913-14 and the opening balances of 1914–15 are due to transfer of cases between A and B.

(*b*) Excludes 57 cases belonging to the Parlakimedi Maliahs.
(*c*) Do. 3 do.
(*d*) Do. 221 do.
(*e*) Do. 11 do.
(*f*) Do. 7 do.
(*g*) Do. 242 do.
(*h*) Do. 299 do.

FORM No. 71.

Madras Presidency.

Forest Rules during 1914–15.

Disposed of during the year.						Cases pending at close of the year.
Convictions.		Acquittals.		Total.		
Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
(9)	(10)	(11)	(12)	(13)	(14)	(15)
CIRCLE.						
37	137	10	32	47	169	18
..	..	303	1,165	303	1,165	63
..	..	..	..	* 75	1,281	
				..	..	..
(*i*) 37	(*j*) 137	(*k*) 313	(*l*) 1,197	(*m*) 350	(*n*) 1,334	(*o*) 81
				* 75	1,281	
66	208	11	37	77	245	9
				* 3	2	
..	..	231	438	231	438	49
..	..	..	..	* 26	26	
				..	..	..
66	208	242	475	308	683	58
				* 29	28	
..	..	..	..	..	..	..
..	..	62	141	62	141	12
..	..	..	..	* 20	62	
				..	..	..
..	..	62	141	62	141	12
				* 20	62	
56	163	12	34	68	197	19
..	..	244	546	244	546	50
..	..	..	..	* 35	101	
				..	..	..
56	163	256	580	312	743	69
				* 35	101	
94	263	6	17	100	280	14
..	..	221	425	221	425	66
..	..	..	..	* 57	198	
				..	..	..
94	263	227	442	321	705	80
				* 57	198	
46	193	12	27	58	220	9
..	..	336	859	336	859	72
..	..	..	..	* 22	69	
				..	..	..
46	193	348	886	394	1,079	81
				* 22	69	
196	770	5	8	201	778	29
..	..	312	875	312	875	31
				* 70	233	
				(*p*) 2		
..	..	..	..	..	..	..
196	770	317	883	513	1,653	60
				* 70	233	
				(*p*) 2		

* Cases withdrawn under the orders of the District Forest Officer or Revenue Divisional Officer.

(*i*) Excludes 204 cases belonging to the Parlākimedi Maliahs, of which 137 cases were compounded by the Special Forest Officer and 67 cases ended in conviction in the Courts.

(*j*) Excludes 349 persons concerned in the 204 cases referred to in the Parlākimedi Maliahs.

(*k*) Excludes 19 cases belonging to the Parlākimedi Maliahs, of which 1 case was acquitted by the Court and 18 cases were withdrawn by the Special Forest Officer.

(*l*) Excludes 31 persons concerned in 19 cases belonging to the Parlākimedi Maliahs.

(*m*) Excludes 223 cases belonging to the Parlakimedi Maliahs.

(*n*) Do. 380 persons concerned in 223 cases belonging to the Parlakimedi Maliahs.

(*o*) Do. 76 cases belonging to the Parlākimedi Maliahs.

(*p*) Cases transferred to West Kurnool and Cuddapah.

Register of Breaches of

District.		Cases pending from 1913-14.	New cases of the year.					Total cases.
			Injury to forests by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)
								NORTHERN
Kurnool, West ..	A	(a) 90	..	158	62	17	237	327
	B	(a) 96	..	432	174	16	622	718
	C	..	101	55	10	1	167	..
	Total ..	186	101	645	246	34	1,026	1,045
Total ..	A	252	8	462	194	63	727	979
	B	422	5	1,812	706	132	2,655	3,077
	C	..	289	183	34	3	509	..
	Grand Total ..	674	302	2,457	934	198	3,891	4,056
								CENTRAL
Bellary	A	9	..	71	18	13	102	111
	B	210	1	365	502	47	915	1,125
	C	..	..	1	30	..	31	..
	Total ..	219	1	437	550	60	1,048	1,236
Anantapur ..	A	138	..	239	62	14	315	453
	B	..	..	430	150	10	590	590
	C	..	71	50	263	..	384	..
	Total ..	138	71	719	475	24	1,289	1,043
Guntur	A	244	..	133	199	16	348	592
	B	111	..	657	662	44	1,363	1,474
	C	..	..	58	..	2	60	..
	Total ..	355	..	848	861	62	1,771	2,066
Cuddapah, West ..	A	47	1	254	123	19	397	444
	B	216	1	339	114	32	486	702
	C	..	..	2	2	..	4	..
	Total ..	263	2	595	239	51	887	1,146
Cuddapah, East..	A	(a) 62	1	123	39	5	168	230
	B	(a) 68	..	529	171	8	708	776
	C	..	..	3	..	..	3	..
	Total .	130	1	655	210	13	879	1,006
Nellore	A	(a) 73	..	171	273	20	464	537
	B	(a) 240	1	562	634	14	1,211	1,451
	C	..	9	147	..	..	156	..
	Total ..	313	10	880	907	34	1,831	1,988

A = Cases taken into Court.
B = Cases compounded by District Forest Officer or Revenue Divisional Officer.
C = Cases undetected.

(a), Variations between the closing balance of 1913-14 and the opening balance of 1914-15 are due to transfer of cases between A and B.

Forest Rules during 1914-15—*cont.*

Disposed of during the year.						Cases pending at close of the year.
Convictions.		Acquittals.		Total.		
Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
(9)	(10)	(11)	(12)	(13)	(14)	(15)
CIRCLE—*cont.*						
263	733	32	188	295	921	31
				* 1	5	
..	..	621	1,527	621	1,527	84
				* 13	22	
..	..	..	..	..	..	..
263	733	653	1,715	916	2,448	115
				* 14	27	
758	2,467	88	343	846	2,810	129
				* 4	7	
				2,330	5,976	
..	..	2,330	5,976	* 318	1,992	427
				(*b*) 2		
..	..	..	..	..	..	..
758	2,467	2,418	6,319	3,176	8,786	556
				* 322	1,999	
				(*b*) 2		
CIRCLE.						
85	194	17	66	102	260	9
924	2,175	..	..	924	2,175	152
				* 49	106	
..	..	..	..	..	..	..
1,009	2,369	17	66	1,026	2,435	161
				* 49	106	
221	506	103	269	324	775	129
502	1,073	..	..	502	1,073	88
..	..	..	..	..	..	..
723	1,579	103	269	826	1,848	217
399	1,587	5	30	404	1,617	188
1,068	3,256	..	..	1,068	3,256	350
				* 56	138	
..	..	..	..	..	..	..
1,467	4,843	5	30	1,472	4,873	538
				* 56	138	
289	955	13	40	302	995	142
539	1,105	..	..	539	1,105	107
				* 56	183	
..	..	..	..	..	..	..
828	2,060	13	40	841	2,100	249
				* 56	183	
210	474	15	61	225	535	5
582	1,381	..	..	582	1,381	136
				* 58	151	
..	..	..	..	..	..	..
792	1,855	15	61	807	1,916	141
				* 58	151	
401	1,414	42	181	443	1,595	94
1,115	2,245	..	..	1,115	2,245	296
				* 40	186	
..	..	..	..	..	..	..
1,516	3,659	42	181	1,558	3,840	390
				* 40	186	

* Cases withdrawn under the orders of the District Forest Officer or Revenue Divisional Officer.
(*b*) Cases transferred to West Kurnool to Cuddapah.

Register of Breaches of

District.		Cases pending from 1913-14.	New cases of the year.					Total cases.
			Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)
								CENTRAL
Chingleput ..	A	16	..	161	93	13	267	283
	B	127	..	830	623	31	1,484	1,611
	C	..	2	5	2	..	9	..
	Total ..	143	2	996	718	44	1,760	1,894
Chittoor ..	A	(a) 79	..	99	90	21	210	289
	B	(a) 102	..	728	479	23	1,230	1,332
	C	..	41	..	..	..	41	..
	Total ..	181	41	827	569	44	1,481	1,621
Total..	A	(a) 668	2	1,251	897	121	2,271	2,939
	B	(a) 1,074	3	4,440	3,335	209	7,987	9,061
	C	..	123	266	297	2	688	..
	Grand Total ..	1,742	128	5,957	4,529	332	10,946	12,000
								SOUTHERN
North Vellore.	A	85	1	90	84	14	189	274
	B	227	..	1,040	435	24	1,499	1,726
	C	..	34	..	14	..	48	..
	Total ..	312	35	1,130	533	38	1,736	2,000
South Vellore.	A	38 + 62	..	264	78	22	364	464
	B	252 — 62	..	813	336	216	1,365	1,555
	C	..	42	29	..	37	108	..
	Total ..	290	42	1,106	414	275	1,837	2,019
South Arcot ..	A	81 + 187	..	576	323	20	919	1,187
	B	499 — 187	..	1,215	579	10	1,804	2,116
	C	..	7	87	..	..	94	..
	Total ..	580	7	1,878	902	30	2,817	3,303
North Salem ..	A	36 + 46	1	263	53	11	328	410
	B	203 — 46	..	874	248	50	1,172	1,329
	C	..	42	4	..	..	46	..
	Total ..	239	43	1,141	301	61	1,546	1,739
South Salem ..	A	66	..	209	47	19	275	341
	B	144	.	445	167	83	695	839
	C	..	23	37	..	..	60	..
	Total ..	210	23	691	214	102	1,030	1,180

A = Cases taken to Court.
B = Cases compounded by District Forest Officer or Revenue Divisional Officer.
C = Cases undetected.

Note (*Southern Circle*).—Alterations in column 2 represent transfer between A and B.

(*a*) Variations between the closing balance of 1913-14 and the opening balance of 1914-15 are due to transfer of cases between the heads A and B.

Forest Rules during 1914-15—*cont.*

Disposed of during the year.						Cases pending at close of the year.
Convictions.		Acquittals.		Total.		
Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
(9)	(10)	(11)	(12)	(13)	(14)	(15)
CIRCLE—*cont.*						
259	451	12	18	271	469	12
1,406	1,749	..	..	1,406	1,749	143
				* 62	147	
..	..	..	..	..	..	..
1,665	2,200	12	18	1,677	2,218	155
				* 62	147	
249	620	19	90	268	710	21
1,072	1,606	..	..	1,072	1,606	146
				* 114	270	
..	..	..	..	..	..	..
1,321	2,226	19	90	1,340	2,316	167
				* 114	270	
2,113	6,201	226	755	2,339	6,956	600
7,208	14,590	..	..	7,208	14,590	1,418
				* 435	1,181	
..	..	..	..	..	..	..
9,321	20,791	226	755	9,547	21,546	2,018
				* 435	1,181	
CIRCLE.						
164	386	22	51	186	437	74
				* 14	33	
1,376	2,807	..	..	1,376	2,807	226
				* 124	172	
..	..	..	..	..	..	..
1,540	3,193	22	51	1,562	3,244	300
				* 138	205	
329	912	16	44	345	956	118
				* 1	2	
997	2,023	..	..	997	2,023	238
				* 320	509	
..	..	..	..	..	..	..
1,326	2,935	16	44	1,342	2,979	356
				* 321	511	
970	2,413	18	45	988	2,458	75
				* 124	338	
1,622	2,914	..	..	1,622	2,914	440
				* 54	130	
..	..	..	..	..	..	..
2,592	5,327	18	45	2,610	5,372	515
				* 178	468	
385	779	6	14	391	793	19
964	1,611	..	..	964	1,611	270
				* 95	197	
..	..	..	..	..	..	..
1,349	2,390	6	14	1,355	2,404	289
				* 95	197	
219	907	10	44	229	951	112
621	1,363	..	..	621	1,363	171
				* 47	156	
..	..	..	..	..	..	..
840	2,270	10	44	850	2,314	283
				* 47	156	

* Cases withdrawn under the orders of the District Forest Officer or Revenue Divisional Officer.

Register of Breaches of

District.		Cases pending from 1913-14.	New cases of the year.					Total cases.
			Injury to forests by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)
SOUTHERN								
Trichinopoly	A	36 + 2	1	50	29	7	87	125
	B	310 − 2	..	2,019	376	64	2,459	2,767
	C	..	9	16	2	..	27	..
	Total	346	10	2,085	407	71	2,573	2,892
Madura	A	74	1	315	108	31	455	529
	B	564	..	1,050	297	34	1,381	1,945
	C	..	62	19	..	..	81	..
	Total	638	63	1,384	405	65	1,917	2,474
Tinnevelly	A	22	2	169	56	6	233	255
	B	177	..	463	159	32	654	831
	C	..	24	44	..	..	68	..
	Total	199	26	676	215	38	955	1,086
Total, Southern Circle.	A	735	6	1,986	778	130	2,850	3,585
	B	2,079	..	7,919	2,597	513	11,029	13,108
	C	..	243	236	16	37	532	..
	Grand Total	2,814	249	10,091	3,391	680	14,411	16,693
WESTERN								
South Canara	A	(*a*) 29	4	109	17	32	162	191
	B	(*a*) 206	49	863	108	129	1,149	1,355
	C	..	57	..	..	..	57	..
	Total	235	110	972	125	161	1,368	1,546
Malabar, North	A	1	..	..	..	2	2	3
	B	..	5	15	3	5	28	28
	C	..	1	..	..	..	1	..
	Total	1	6	15	3	7	31	31
Malabar, South.	A	1	..	4	..	2	6	7
	B	1	..	6	20	15	41	42
	C	..	2	2	..	..	4	..
	Total	2	2	12	20	17	51	49
The Nilgiris	A	7	1	26	23	9	59	66
	B	6	..	77	112	18	207	213
	C	..	11	..	..	..	11	..
	Total	13	12	103	135	27	277	279

A = Cases taken into Court.
B = Cases compounded by District Forest Officer or Revenue Divisional Officer.
C = Cases undetected.

(*a*) Variations between the closing balance of 1913-14 and the opening balance of 1914-15 are due to transfer of cases between A and B.

Note (Southern Circle).—Alterations in column 2 represent transfers between A and B.

Forest Rules during 1914–15 —*cont.*

Disposed of during the year.						
Convictions.		Acquittals.		Total.		Cases pending at close of the year.
Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
(9)	(10)	(11)	(12)	(13)	(14)	(15)
Circle—*cont.*						
60	163	30	155	90	318	35
1,974	3,232	..	..	1,974	3,232	501
..	..	..	..	* 292	477	
..	..	..	..	..	..	..
2,034	3,395	30	155	2,064	3,550	536
				* 292	477	
349	1,535	52	229	401	1,764	122
1,390	3,982	..	..	1,390	3,982	446
..	..	..	..	* 109	424	
				..	..	..
1,739	5,517	52	229	1,791	5,746	574
				* 109	424	
236	691	4	7	240	698	15
713	1,711	..	..	713	1,711	118
..	..	..	..	..	..	..
949	2,402	4	7	953	2,409	133
2,712	7,786	158	589	2,870	8,375	576
				* 139	373	
9,657	19,643	..	..	9,657	19,643	2,410
				* 1,041	2,065	
..	..	..	..	..	..	..
12,369	27,429	158	589	12,527	28,018	2,986
				* 1,180	2,438	
Circle.						
154	375	18	31	172	406	19
982	1,994	..	..	982	1,994	259
..	..	..	..	* 114	229	
				..	..	..
1,136	2,369	18	31	1,154	2,400	278
				* 114	229	
2	4	..	..	2	4	1
15	17	..	..	15	17	8
..	..	..	..	* 5	16	
				..	..	..
17	21	..	..	17	21	9
				* 5	16	
3	4	1	2	4	6	2
				* 1	2	
39	69	..	..	39	69	..
				* 3	3	
..	..	..	..	..	..	..
42	73	1	2	43	75	2
				* 4	5	
52	146	6	15	58	161	8
118	280	..	..	118	280	44
..	..	..	..	* 51	106	
				..	..	..
170	426	6	15	176	441	52
				* 51	106	

* Cases withdrawn under the orders of the District Forest Officer or Revenue Divisional Officer.

Register of Breaches of

District.		Cases pending from 1913-14.	New cases of the year.					Total cases.
			Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)
								WESTERN
Kollegal ..	A	(a) 28	..	24	16	2	42	70
	B	(a) 33	..	80	58	2	140	173
	C	..	15	14	15	2	46	..
	Total ..	61	15	118	89	6	228	243
Coimbatore, North.	A	27	4	68	42	5	119	146
	B	37	..	201	81	12	294	331
	C	..	23	..	..	..	23	..
	Total ..	64	27	269	123	17	436	477
Coimbatore, Central.	A	30	2	110	41	20	173	203
	B	65	..	270	68	46	384	449
	C	..	8	6	..	..	14	..
	Total ..	95	10	386	109	66	571	652
Coimbatore, South.	A	17	..	79	13	3	95	112
	B	22	..	181	24	6	211	233
	C	..	16	9	..	..	25	..
	Total ..	39	16	269	37	9	331	345
Grand total	A	140	11	420	152	75	658	798
	B	370	54	1,693	474	233	2,454	2,824
	C	..	133	31	15	2	181	..
	Total ..	510	198	2,144	641	310	3,293	3,622
Total	A	1,795	27	4,069	2,021	389	6,506	8,301
	B	3,945	62	15,864	7,112	1,087	24,125	28,070
	C	..	788	716	362	44	1,910	..
Grand total, Presidency ..		5,740	877	20,649	9,495	1,520	32,541	36,371

A = Cases taken into Court. B = Cases compounded. C = Cases undetected.

(a) The variations between the closing balance of 1913-14.

* Cases withdrawn under the orders of the District Forest Officer or Revenue Divisional Officer.

Forest Rules during 1914–15—*cont.*

Disposed of during the year.						Cases pending at close of year.
Convictions.		Acquittals.		Total.		
Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
(9)	(10)	(11)	(12)	(13)	(14)	(15)
CIRCLE—*cont.*						
56	165	8	35	64	200	6
140	327	..	..	140	327	27
				* 6	9	
..	..	..	..	..	..	..
196	492	8	35	204	527	33
				* 6	9	
103	265	3	13	106	278	40
241	606	..	..	241	606	59
				* 31	89	
..	..	..	..	..	..	..
344	871	3	13	347	884	99
				* 31	89	
163	487	14	59	177	546	26
335	730	..	..	335	730	82
				* 32	71	
..	..	..	..	..	..	..
498	1,217	14	59	512	1,276	108
				* 32	71	
91	328	8	35	99	363	13
171	461	..	..	171	461	46
				* 16	32	
..	..	..	..	..	..	..
262	789	8	35	270	824	59
				* 16	32	
624	1,774	58	190	682	1,964	115
				* 1	2	
2,041	4,484	..	..	2,041	4,484	525
				* 258	555	
..	..	..	..	..	..	..
2,665	6,258	58	190	2,723	6,448	640
				* 259	557	
6,207	18,228	530	1,877	6,737	20,105	1,420
				* 144	382	
..	..	21,236	44,693	21,236	44,693	4,780
				* 2,054	5,800	
..	..	..	..	..	..	..
6,207	18,228	21,766	46,570	27,973	64,798	6,200
				* 2,198	6,182	

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ANNUAL FORM No. 72.

Forest Department, Madras Presidency.

AREA of forest tracts protected from fire during 1914–15.

District.	Forest tracts.	Area protected during the previous year.	During the year under report.			Cost during the year under report.	Remarks.
			Area attempted to be protected.	Fires.	Actually protected.		
	Northern Circle.	ACS.	ACS.	ACS.	ACS.	RS.	
Ganjām ..	Special protection ..	99,464	102,537	130	102,407	4,463	
	General do. ..	38,054	38,538	1,044	37,494	1,242	
	Total, Ganjām ..	(*d*)137,518	(*e*) 141,075	(*f*) 1,174	(*g*)139,901	(*h*) 5,705	
Vizagapatam.	Special protection ..	67,984	68,191	3,320	64,871	1,812	
	General do. ..	107,216	123,302	8,831	114,471	258	
	Total, Vizagapatam ..	175,200	191,493	12,151	179,342	2,070	
Gōdāvari, Upper.	Special protection ..	379,957	532,793	63,979	468,814	6,999	
	General do. ..	..	..	..	..	..	
	Total, Gōdāvari, Upper..	379,957	532,793	63,979	468,814	6,999	
Gōdāvari, Lower.	Special protection ..	..	..	..	..	4,440	
	General do. ..	228,723	240,870	1,331	239,539	..	
	Total, Gōdāvari, Lower..	228,723	240,870	1,331	239,539	4,440	
Kistna ..	Special protection ..	58,564	60,229	33	60,196	1,246	
	General do. ..	..	..	..		..	
	Total, Kistna ..	58,564	60,229	33	60,196	1,246	
Kurnool, East.	Special protection ..	86,813	151,235	15,144	136,091	13,185.	
	General do. ..	534,924	489,067	1,739	487,328	..	
	Total, Kurnool, East ..	621,737	640,302	16,883	623,419	13,185	
Kurnool, South.	Special protection ..	(*a*)171,926	334,148	78,213	255,935	13,639	
	General do. ..	(*a*)275,068	156,316	4,630	151,686	..	
	Total, Kurnool, South ..	446,994	490,464	82,843	407,621	13,639	
Kurnool, West.	Special protection ..	81,365	155,648	5,921	149,727	17,989	
	General do. ..	(*b*) 351,617	393,472	41,464	352,008	..	
	Total, Kurnool, West ..	432,982	549,120	47,385	501,735	17,989	
Total ..	Special protection ..	946,073	1,404,781	166,740	1,238,041	63,773	
	General do. ..	1,535,602	1,441,565	59,039	1,382,526	1,500	
	Grand total ..	2,481,675	2846,346	225,779	2,620,567	65,273	
	Central Circle.						
Bellary ..	Special protection ..	50,689	95,250	4,932	90,318	6,869	
	General do. ..	2,274	1,069	350	719	..	
	Total ..	52,963	96,319	5,282	91,037	6,869	
Anantapur ..	Special protection ..	379,811	420,314	9,980	410,334	7,015	
	General do. ..	..	52,460	38	52,422	..	
	Total ..	379,811	472,774	10,018	462,756	7,015	
Guntūr ..	Special protection ..	13,084	13,334	50	13,284	15	
	General do. ..	20,940	21,203	2	21,201	(*c*) + 5 60	
	Total ..	34,024	34,537	52	34,485	80	
Cuddapah, West.	Special protection ..	238,555	254,939	55,238	199,701	3,207	
	General do. ..	85,074	87,697	4,569	83,128	(*c*) + 281 630	
	Total ..	323,629	342,636	59,807	282,829	4,118	

(*a*) The differences between the closing balances of last year and opening balance of the current year are due to transfer of 10,919 acres from special to general protection.

(*b*) Last year's figure given in column 7 is incorrect and the correct one is now adopted.

(*c*) Added or deducted as per audited figure.

(*d*) Excludes 71,006 acres belonging to the Parlakimedi Maliahs.

(*e*) Do. 91,014 do. do.

(*f*) Do. 1,612 do. do.

(*g*) Do. 89,402 do. do.

(*h*) Do. Rs. 437 spent on fire protection operations in the Parlakimedi Malaiahs.

Area of forest tracts protected from fire during 1914-15—*cont.*

District.	Forest tracts.	Area protected during the previous year.	During the year under report.			Cost during the year under report.	Remarks.
			Area attempted to be protected.	Fires.	Actually protected.		
	Central Circle—cont.	ACS.	ACS.	ACS.	ACS.	RS.	
Cuddapah, East.	Special protection ..	273,653	98,981	5,652	93,329	3,702	
	General do. ..	123,758	330,654	70,196	260,458	..	
	Total ..	397,411	429,635	75,848	353,787	3,702	
Nellore ..	Special protection ..	128,698	129,124	617	128,507	1,605	
	General do. ..	..	..	..	..	..	
	Total ..	128,698	129,124	617	128,507	1,605	
Chingleput ..	Special protection ..	25,649	25,857	352	25,505	957	
	General do. ..	108,122	107,607	5	107,602	..	
	Total ..	133,771	133,464	357	133,107	957	
Chittoor ..	Special protection ..	132,012	136,837	1,022	135,815	1,724	
	General do. ..	351,660	336,036	3,821	332,215	(*a*) — 1	
	Total ..	483,672	472,873	4,843	468,030	1,723	
Total ..	Special protection ..	1,242,151	1,174,636	77,843	1,096,793	25,094	
	General do. ..	691,828	936,726	78,981	857,745	(*a*) + 285 690	
	Grand Total ..	1,933,979	2,111,362	156,824	1,954,538	26,069	
	Southern Circle.						
Vellore, North.	Special protection ..	57,334	50,922	1,058	49,864	725	
	General do. ..	255,498	279,452	1,159	278,293	..	
	Total ..	312,832	330,374	2,217	328,157	725	
Vellore, South.	Special protection ..	141,545	122,587	372	122,215	2,330	
	General do. ..	308,264	322,365	1,343	321,022	..	
	Total ..	449,809	444,952	1,715	443,237	2,330	
South Arcot.	Special protection ..	13,541	13,541	..	13,541	186	
	General do. ..	201,962	201,281	9	201,272	..	
	Total ..	215,503	214,822	9	214,813	186	
Salem, North	Special protection ..	63,723	65,562	3,366	62,196	3,227	
	General do. ..	459,522	471,102	1,536	469,566		
	Total ..	523,245	526,664	4,902	531,762	3,227	
Salem, South	Special protection ..	227,123	217,269	382	216,887	2,270	
	General do. ..	155,166	154,412	307	154,105	..	
	Total ..	382,289	371,681	689	370,992	2,270	
Trichinopoly.	Special protection ..	22,184	22,199	106	22,093	530	
	General do. ..	81,616	81,626	(*b*) 30	81,596	345	
	Total ..	103,800	103,825	136	103,689	875	
Madura ..	Special protection ..	(*c*)168,056	127,242	1,324	125,918	4,336	
	General do. ..	(*c*)246,989	291,132	2,282	288,850	..	
	Total ..	415,045	418,374	3,606	414,768	4,336	
Tinnevelly	Special protection ..	31,297	35,377	5,111	30,266	5,444	
	General do. ..	202,079	206,712	2,320	204,392	..	
	Total ..	233,376	242,089	7,431	234,658	5,444	
	Total, Special protection.	724,803	654,699	11,719	642,980	19,048	
	Total, General protection.	1,911,096	2,008,082	8,986	1,999,096	345	
	Grand total (Special and General).	2,635,899	2,662,781	20,705	2,642,076	19,393	

(*a*) Added or deducted as per audited figure.
(*b*) Excludes 10 acres burnt in areas not brought under protection.
(*c*) Revised and correct figures furnished by the Collector.

Area of forest tracts protected from fire during 1914-15—*cont.*

District.	Forest tracts.	Area protected during the previous year.	During the year under report.			Cost during the year under report.	Remarks
			Area attempted to be protected.	Fires.	Actually protected.		
	Western Circle.	ACS.	ACS.	ACS.	ACS.	RS.	RS.
South Canara.	Special protection ..	134,604	142,561	514	142,047	2,642 * + 729	* Fire-tracing Mysore-South Canara boundary. 698 Fire-tracing cart-stands, etc. .. 18 Cost of previous year disbursed during the year .. 18 Total .. 729
	General do. ..	369,180	368,185	1,292	366,893	1,049	
	Total ..	503,784	510,746	1,806	508,940	4,420	
Malabar, North.	Special protection ..	131,434	139,089	49	139,040	7,454	
	General do. ..	..	..	..	..	..	
	Total ..	131,434	139,089	49	139,040	7,454	
Malabar, South.	Special protection ..	79,444	82,117	10	82,107	2,738 † + 15	† Cost of putting out a fire in an unprotected area.
	General do. ..	..	..	..	..	..	
	Total ..	79,444	82,117	10	82,107	2,753	
The Nilgiris.	Special protection ..	58,472	74,530	177	74,353	3,758	
	General do. ..	..	..	..	..	..	
	Total ..	58,472	74,530	177	74,353	3,758	
Kollegal ..	Special protection ..	37,685	67,717	3,327	64,390	3,059	
	General do. ..	323,565	399,490	7,031	392,459	..	
	Total ..	361,250	467,207	10,358	456,849	3,059	
Coimbatore, North.	Special protection ..	64,849	72,484	850	71,634	3,223	
	General do. ..	494,836	517,494	8,231	509,263	..	
	Total ..	559,685	589,978	9,081	580,897	3,223	
Coimbatore, Central.	Special protection ..	104,696	105,122	147	104,975	2,384 (a) + 19 (b) — 32	(a) Cost of previous year disbursed during the year.
	General do. ..	120,330	120,841	111	120,730	..	
	Total ..	225,026	225,963	258	225,705	2,371	
Coimbatore, South.	Special protection ..	42,614	45,737	237	45,500	2,328	(b) Cash recovery of service payments.
	General do. ..	181,000	182,540	6,940	175,600	..	
	Total ..	223,614	228,277	7,177	221,100	2,328	
	Total, Special, Western Circle.	653,798	729,357	5,311	724,046	27,586 + 731	
	Total, General, Western Circle.	1,488,911	1,588,550	23,605	1,564,945	1,049	
	Grand total ..	2,142,709	2,317,907	28,916	2,288,991	29,366	
	Total, Special protection.	3,567,525	3,963,473	2,61,613	3,701,860	1,36,517	
	Total, General protection.	5,627,437	5,974,923	1,70,611	5,804,312	3,584	
	Grand total, Presidency ..	9,194,962	9,938,396	4,32,224	9,506,172	1,40,101	

ANNUAL FORM No. 73.

Forest Department, Madras Presidency.

AREA closed and open to grazing during 1914–15.

District.	Area in square miles.						
	Closed to all animals.		Closed to both goats and sheep.		Area closed to goats only.	Open to all animals.	Total forest area as per form No. 65.
	Whole year.	Part of year.	Whole year.	Part of year.		Whole year.	
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
NORTHERN CIRCLE.							
Reserved forests.							
Ganjām	82	..	..	..	(*c*) 487	..	569
Vizagapatam	15	..	2	..	294	..	311
Gōdāvari, Upper	2	..	..	..	426	..	428
Do. Lower	48	..	229	..	132	..	404
Kistna	58	..	..	..	213	..	271
Kurnool, East	157	..	..	..	843	..	1,000
Do. South	566	..	..	..	200	..	766
Do. West	240	..	..	..	627	..	867
Total	1,163	..	231	..	3,222	..	4,616
Reserved lands.							
Ganjām	..	..	..	..	70	..	70
Vizagapatam	..	..	..	..	3	..	(*a*) 3
Godavari, Upper	..	..	..	..	354	..	354
Do. Lower	..	..	..	..	75	..	75
Kistna	..	..	..	..	..	..	..
Kurnool, East	..	..	..	..	..	..	..
Do. South	..	..	..	..	..	..	..
Do. West	..	..	..	..	..	..	..
Total	..	..	..	..	502	..	502
CENTRAL CIRCLE.							
Reserved forests.							
Bellary	182	..	..	..	357	80	619
Anantapur	154	15	..	..	574	..	743
Guntūr	59	..	..	..	633	122	814
Cuddapah, West	66	..	..	..	668	..	734
Do. East	164	..	..	..	920	..	1,084
Nellore	55	..	..	..	674	..	729
Chingleput	40	..	..	..	166	3	209
Chittoor	156	29	..	..	650	3	838
Total	876	44	..	..	4,642	208	5,770
Reserved lands.							
Bellary	63	..	..	..	..	..	63
Anantapur	..	..	..	..	..	10	10
Guntūr	..	..	..	..	..	..	..
Cuddapah, West	..	..	..	..	..	..	..
Do. East	..	..	..	..	..	..	..
Nellore	..	..	..	..	..	..	..
Chingleput	..	..	..	..	..	..	..
Chittoor	..	..	..	..	..	..	..
Total	63	..	..	..	..	10	73
SOUTHERN CIRCLE							
Reserved forests.							
Vellore, North	54	..	..	..	437	..	491
Do. South	51	..	..	..	661	..	712
South Arcot	34	..	..	..	302	..	336
Salem, North	102	..	..	..	690	..	792
Do. South	66	..	..	..	515	..	581
Trichinopoly	44	2	..	..	309	..	355
Madura	94	..	..	..	563	..	657
Tinnevelly	225	53	2	2	147	..	429
Total	670	55	2	2	3,624	..	4,353
Reserved lands.							
Vellore, North	..	..	..	..	(*b*)	..	..
Do. South	..	..	..	..	(*b*)	..	..
South Arcot	..	..	..	..	..	..	..
Salem, North	..	..	..	..	46	..	46
Do. South	..	..	..	..	18	..	18
Trichinopoly	..	..	..	..	9	..	9
Madura	..	..	..	..	(*b*)	..	..
Tinnevelly	..	..	..	..	..	..	..
Total	..	..	..	..	73	..	73

(*a*) Includes 20·5 square miles of Karakavalasa leased forests and its east and west blocks.
(*b*) Area omitted being less than a square mile.
(*c*) Excludes 167 square miles belonging to the Parlakimedi Maliahs.

Area closed and open to grazing during 1914–15—*cont.*

District.	Area in square miles.						
	Closed to all animals.		Closed to both goats and sheep.		Area closed to goats only.	Open to all animals.	Total forest area as per Form No. 65.
	Whole year.	Part of year.	Whole year.	Part of year.		Whole year.	
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.		SQ. MLS.
WESTERN CIRCLE.							
Reserved forests.							
South Canara	10	..	..	..	788	..	798
Malabar, North	30	..	233	..	..	..	263
Do. South	143	..	..	..	..	..	143
The Nilgiris	23	..	..	..	452	..	475
Kollegal	79	..	..	..	651	..	730
Coimbatore, North ..	57	..	..	..	865	..	922
Do. Central ..	147	..	..	..	206	..	353
Do. South ..	85	3	179	..	187	..	454
Total ..	574	3	412	..	3,149	..	4,138
Reserved lands.							
South Canara	..	..	..	..	*	..	*
Malabar, South	20	..	..	..	..	..	20
The Nilgiris	4	..	..	..	79	..	83
Kollegal	..	..	..	..	1	..	1
Coimbatore, North ..	..	..	..	..	*	..	*
Do. Central ..	10	..	..	..	..	..	10
Do. South ..	*	..	..	..	*	..	*
Total ..	34	..	..	..	80	..	114
Grand total ..	608	3	412	..	3,229	..	4,252
Grand total, Presidency ..	3,880	102	645	2	15,292	218	19,639

* Less than one square mile.

ANNUAL FORM No. 74.

Forest Department, Madras Presidency.

RETURN of Grazing in the State forests during 1914–15.

ANNUAL.

Forest Department,

RETURN of grazing in the

Districts.	Grazing on payment. Number of animals.									
	At enhanced or special rates.					At full rates.				
	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.
(1)	(2)	(3)	(4)	5)	(6)	(7)	(8)	(9)	(10)	(11)
NORTHERN CIRCLE.					Rs.					Rs.
Ganjām	..	..	..	..	..	(*a*) & (*p*) 10,785	(*p*) & (*q*) 37,191	(*a*) S 570	.. / Fodder grass.	11,075 / (*r*) 153
Vizagapatam ..	(*b*) 223	(*b*) 3,174	(*b*) S 3,471	..	1,339	(*a*) 1,255	(*a*) 17,143	(*a*) S 1,586	..	3,834
Gōdāvari, Upper..	..	..	..	..	..	..	..	..	..	..
Do. Lower ..	(*f*) 1,199	(*f*) 478	..	..	1,078	(*h*) 2,423	(*h*) 2,856	..	..	1,925
Kistna	(*f*) 415	(*f*) 5,057 / (*i*) 1,742	(*f*) S 2,083	..	4,340	(*a*) 4,656	(*a*) 20,039	(*a*) S 19,199	.. / Fodder grass.	7,303 / 612
Kurnool, East ..	(*b*) 7,487	(*b*) 78,479	(*b*) S 35,345	..	27,744	(*a*) 1,745	(*a*) 7,230	(*a*) S 22,589	..	4,128
Do. South ..	(*b*) 703	(*b*) 4,712	(*b*) S 7,709	..	2,493	(*a*) 2,274	(*a*) 15,007	(*a*) S 26,128	.. / Fodder grass.	6,116 / 366
Do. West ..	(*b*) 5,080	(*b*) 31,154	(*b*) S 16,404	.. Fodder grass.	12,379 / 21	(*a*) 4,101	(*a*) 34,859	(*a*) S 63,096	..	.. 13,989
Total ..	15,107	124,796	S 65,012	Fodder grass.	49,394	(*a*1) 27,239	134,325	S 133,168	Fodder grass ..	49,501
Unreserved lands.										
Gōdāvari, Upper..	(*c*) 139	(*c*) 240	(*c*) S 2,078 / (*c*) G 2,150	..	439	..	..	..	..	..
Do. Lower..	(*f*) 186	(*f*) 29	..	..	150	(*h*) 6,613	(*h*) 7,222	..	.. / Fodder grass.	7,607 / 20
Kistna	..	..	..	..	..	(*a*) 702	(*a*) 222	..	.. / Fodder grass.	305 / 228
Total ..	325	269	S 2,078 / G 2,150	..	589	7,315	7,444	..	Fodder grass ..	(*a*1) 8,155
Grand total ..	15,432	125,065	S 67,090 / G 2,150	Fodder grass	49,983	(*a*1) 34,554	141,769	S 133,168	Fodder grass ..	(*a*1) 57,656
CENTRAL CIRCLE.										
Bellary	..	..	G 29,208	..	7,302	15,641	73,037	S 160,644	..	34,620
Anantapur ..	..	..	..	..	..	4,723	80,399	S 166,460	..	32,451
	..	..	..	..	.. (*o*)	65	1,900	8,434	..	586
	..	..	..	..	..	Panchayat fees.			..	429
Guntūr	(*p*) 620	2,202	G 56,999	..	16,527	16,232	22,876	S 103,254	..	20,056
	..	..	S 11,334	..		..	..	.	..	..
	(*q*) 1,528	61,097	S 75,869	..	38,283	..	..	..	..	..
	(*r*) ..	6,759	..	..	6,759	..	..	..	..	..
Cuddapah, West.	..	..	..	..	..	2,135	37,790	S 105,244	..	17,753
	..	..	..	..	..	Penning fees.			..	101
	..	..	..	..	..	3,458	46,593	S 79,218	..	17,460
Do. East..	..	..	..	..	..	..	..	..	..	..
	..	..	..	..	..	..	..	..	..	..
Nellore	(*s*) ..	54,423	S 109,687	..	27,317	6,851	..	..	..	2,569
	(*t*) ..	..	..	..	..	Kancha rent.			..	32,024
Chingleput ..	..	..	G 426	..	106	2,258	29,847	S 68,297	..	12,846
	..	..	..	..	..	Panchayat fees.			..	283
Chittoor ..	..	..	G 770	..	578	2,462	78,990	S 64,663	..	21,796
	..	..	..	..	..	Penning fees.			..	22
Total ..	2,148	124,481	G 87,403 / S 196,890	..	96,872	53,825	371,432	S 756,214	..	1,92,996

G = Goats. S = Sheep.

(*a*) The full rates are 6 annas per buffalo, 3 annas per cow or bullock and 1 anna 6 pies per sheep.

(*c*) Enhanced rates in Gōdāvari Upper are 8 annas per buffalo, 5 annas per cow or bullock and 1 anna per sheep and 1 anna 6 pies per goat.

(*e*) Privileged rates in Nugur taluk are 4 annas per buffalo, 2 annas per cow or bull, 1 anna 3 pies per goat and 1 anna per sheep.

(*h*) The rates are 8 annas per buffalo and 4 anna per cow or bull.

Central Circle.—The full or normal rates are As. 6 per buffalo, As. 3 per cow and As. 1-6 per sheep.

(*o*) Half the normal rates for half-year in Anantapur.

The enhanced or special rates are—

Goats—Bellary, Guntūr and Chingleput, As. 4; Chittoor, As. 12.

Guntūr .. (*p*) As. 8 per buffalo, As. 4 per cow and As. 2 per sheep. (*q*) As. 12 per buffalo, As. 6 per cow, and As. 3 per sheep. (*r*) Plough bullocks at Re. 1.

Nellore .. (*s*) As. 4 per cow and As. 2 per sheep. (*t*) Kancha rent is charged at a minimum rate of As. 8 per cow unit.

(*a*1) Corrected in the Board's office.

(*p*) Excludes 431 buffaloes belonging to Parlākemedi Maliahs.

(*q*) Excludes 1,452 cows belonging to Parlākemedi Maliahs.

(*r*) Excludes Rs. 434 collected in the Parlākemedi Maliahs.

FORM No. 74.

Madras Presidency.

State forests during 1914–15.

Grazing free. Number of animals.																	Grand total of value at full rates.
At privileged rates.						By right under settlement.					During pleasure of Government or otherwise than under settlement.						
Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received. Actual.	Fees received. Value at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Total value of fees at full rates.	
(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
				Rs.	Rs.					Rs.					Rs.	Rs.	Rs.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11,228
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4,838
(*d*) 5,156	(*d*) 25,300	(*d*) S 10,076	..	2,541	7,622	..	..	..	..	..	4,340	45,247	S 20	..	10,113	10,113	17,735
(*n*) 1,573 (*l*) 604	(*n*) 14,499 (*l*) 16,035	..	..	3,245	8,722	..	..	..	..	..	91	523	..	..	176	176	11,542
..	..	..	..	.	..	..	..	..	..	..	..	..	..	..	..	..	9,541
..	..	..	..	..	..	157	235	G 762 S 1,140	..	281	..	..	..	..	..	..	24,936
..	..	..	..	..	..	2	26	S 66	..	12	..	..	..	..	..	..	7,998
..	..	..	..	..	..	..	1,491	S 3,303	..	589	..	..	..	..	..	..	26,389
7,333	(*o*) 55,834	S 10,076	..	5,786	16,344	159	1,752	G 762 S 4,509	..	882	4,431	(*o*) 45,770	S 20	..	10,289	10,289	1,14,207
(*e*) 6,778	(*e*) 37,385	(*e*) S 1,576 G 812	..	6,280	9,400	..	..	..	..	..	..	..	..	..	..	..	9,888
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7,727
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	533
6,778	37,385	S 1,576 G 812	..	6,280	9,400	..	..	..	..	..	..	..	..	..	..	..	(*o*) 18,148
14,111	(*o*) 93,219	S 11,652 G 812	..	12,066	25,744	159	1,752	S 4,509 G 762	..	882	4,431	(*o*) 45,770	S 20	..	10,289	10,289	(*o*) 1,32,355
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	41,922
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	83,466
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	81,625
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	17,902
(*u*) ..	157	S. 200	..	24	48	..	..	..	..	..	..	..	..	..	..	..	17,682
(*v*) ..	154	..	..	31	71	..	807	..	..	151	..	..	..	..	..	..	68,032
(*w*) ..	223	..	..				..	..	..	..	..	..	..	..	..	..	13,250
(*x*) ..	..	S. 1	..				..	..	..	..	..	4,489	..	..	1,122	1,122	22,896
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
..	..	..	..	..	..	..	..	..	..	..	..	81	..	..	15	15	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
..	534	S 201	..	55	119	..	807	..	.	151	..	4,570	..	..	1,137	1,137	2,91,275

(*b*) Enhanced rates are 8 annas per buffalo, 4 annas per cow or bull and 2 annas per sheep.
(*d*) The privileged rates in Bhadrâchalam taluk are 2 annas per buffalo, 1 anna per cow or bullock and 6 pies per sheep.
(*f*) The enhanced rates are 12 annas per buffalo, 6 annas per cow or bullock and 3 annas per sheep.
(*i*) At Re. 1 per plough bull.
(*l*) At Anna 1 per buffalo or cow or bull.
(*n*) At 4 annas per buffalo and 2 annas per bull or cow.

The privileged rates are—
West Cuddapah .. (*u*) As. 1-6 per cow and 9 pies per sheep.
East Cuddapah .. (*v*) As. 1 per cow, (*w*) As. 1-6 per cow, (*x*) Ps. 6 per sheep.
(*o*) Corrected in the Board's office.

Return of Grazing in the

District.	Grazing on payment. Number of animals.									
	At enhanced or special rates.					At full rates.				
	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Southern Circle.					Rs.					Rs.
Vellore, North	..	..	..	..	..	2,271	68,869	S. 104,954	..	23,604 (a) 74
Do. South	..	23,468	..	..	5,867	1,912	87,563	S. 58,263	..	22,597 (c) 102
Arcot, South	..	(d) 272	(e) S. 430	..	125	5,251	70,373	S. 151,921	..	(g) 29,207
Salem, North	1,940	87,479	S. 28,852	..	26,446	93	20,674	S. 14,578	..	5,278 (c) 335 (b) 86
Do. South	..	..	..	..	..	838	91,336	S. 32,659	..	20,502
Trichinopoly	..	..	G. 130	..	33	2,414	50,607	S. 183,590	..	27,605
Madura	444	63,628	S. 42,835	483	21,604	..	..	..	..	..
Tinnevelly	.	..	..	..	..	612	17,721	S. 32,495	..	6,599 (c) 23 (f) 236
Total ..	2,384	174,847	G. 130 S. 72,117	483	54,075	13,391	407,143	S. 578,460	..	1,36,248
Western Circle.										
Reserved Forests.					Rs.					Rs.
South Canara	..	..	..	..	..	5,317	37,031	..	..	8,937
Malabar, North	..	..	..	..	.	3,388	6,919	..	..	2,568
Do. South	..	..	..	..	..	..	..	..	..	(k) 1
The Nilgiris	..	(i) 1,436 (j) 58	..	..	732	10,304	23,230	2,150	..	8,421 (k) 249
Kollegal *	2,749	77,305	5,329	..	21,367	..	..	..	.	..
Coimbatore, North * ..	5,893	80,291	32,471	..	27,078 (k) 2,008 (l) 25	..	..	..	..	..
Do. Central ..	..	..	..	..	..	242	17,846	16,996	..	5,030 (k) 1,001 (n) 1,074
Do. South ..	..	..	..	..	..	508	38,778	416	(m) 3	2,683 (k) 868
Total ..	8,642	159,090	37,800	..	51,210	19,759	123,804	19,562	3	30,832
Reserved Lands.										
The Nilgiris	..	(i) 315	..	..	157	775	923	..	..	464
Total, Western Circle ..	8,642	159,405	37,800		51,367	20,534	124,727	19,562	3	31,296
Grand Total, Presidency ..	28,606	583,798	(S) 373,897 (G) 89,683	483	2,52,297	122,304	1,045,071	(S) 1,487,404	3	4,18,196

G. = Goats. S. = Sheep.

The enhanced or special rates are buffalo 8 annas and sheep 2 annas in North Salem and Madura, cow, bullock or other animals 4 annas in South Vellore, North Salem and Madura and goats 4 annas in Trichinopoly.

The full rates are 6 annas per buffalo, 3 annas per cow, bullock or other animal and 1½ annas per sheep.

The privileged rates are half the full rates.

(a) Collection from panchayatdars.
(b) Sale-proceeds of fodder grass.
(c) Penning license fee.
(d) Two hundred and forty-four cows at 4 annas each and 28 cows at 5 annas each.
(e) Three hundred and sixty-nine sheep at 2 annas each and 61 sheep at 2½ annas each.
(f) Lease amount for grazing in Kavalkuttiparambu reserved forest.
(g) Excludes Rs. 200 collected in previous years.

Western Circle Remarks.

The full rates are As. 6 per buffalo, As. 3 per cow, bullock or other animals and As. 1-6 per sheep.

(i) Annas 8 per cow or bullock.
(j) Calves, half-rate.
(k) Sale-proceeds of fodder grass.
(l) Recovery of cost of permits lost.
(m) Elephants at Rs. 10 each.
(n) Revenue from reserved forests handed over to Panchayat.

State forests during 1914-15—*cont.*

At privileged rates.						Grazing free. Number of animals.										Grand total of value at full rates.
				Fees received.		By right under settlement.					During pleasure of Government or otherwise than under settlement.					
Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Actual.	Value at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Total value of fees at full rates.	
(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
				Rs.	Rs.					Rs.					Rs.	Rs.	Rs.
61	677	..	..	75	150	..	..	..	..	..	..	..	..	..	(*h*) 2,961	2,961	26,789
2,499	14,501	S. 531	..	1,853	3,706	..	..	..	..	..	140	1,274	S. 9	..	292	292	32,564
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	(*h*) 56	56	29,388
..	..	..	..	..	..	..	..	..	..	..	..	150	..	..	28	28	32,173
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	20,502
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	27,638
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	21,604
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6,858
2,560	15,178	S. 531	..	1,928	3,856	..	..	.	..	..	140	1,424	S. 9	..	3,337	3,337	1,97,516
..	..	..	(*p*) 17,820	2,228	(*h*) 2,228	..	..	..	..	..	..	..	..	..	..	..	11,165
..	..	..	..	..	..	..	..	..	..	..	..	..	..	(*q*) 1	91	91	2,659
..	..	..	..	..	..	..	..	.	..	..	..	..	..	..	..	..	1
..	..	(*o*) 10,944	..	42	1,026	..	..	..	..	..	2,081	..	..	..	780	780	11,208
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	21,367
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	29,111
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7,105
..	..	..	..	..	..	..	..	..	..	.	..	..	..	..	..	..	3,551
..	..	10,944	17,820	2,270	3,254	..	..	..	..	..	2,081	..	..	1	871	871	86,167
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	621
..	..	10,944	17820	2,270	3,254	..	..	..	..	..	2,081	..	..	1	871	871	86,788
16,671	108,931	(S). 23,328 (G). 812	17,820	16,319	32,973	159	2,559	4,599	762	1,033	6,652	51,764	29.	1	15,634	15,634	7,07,934

(*h*) Free removal of grass.

* Annas 8 per buffalo, As. 4 per cow, bullock or other animals and As. 2 per sheep.

(*o*) Annas 3 per 100 per diem.

(*p*) Buffaloes, cows, etc., brought for a cattle fair charged without distinction at a uniform rate of As. 2 per head.

(*q*) Elephant.

ABSTRACT of animals licensed to graze on payment.

Circle.	Buffaloes.	Bullocks and cows.	Sheep.	Goats.	Other animals.	Total.
Northern Circle	64,097	360,053	211,910	2,962	..	639,022
Central Circle	55,973	496,447	953,305	87,403	..	1,593,128
Southern Circle	18,335	597,168	651,108	* 130	483	1,267,224
Western Circle	29,176	284,132	68,306	..	17,823	399,437
Grand Total, Presidency ..	167,581	1,737,800	1,884,629	90,495	18,306	3,898,811

* Allowed in Sripurandan padugai reserve land.

Annual Form No. 75.

Forest Department, Madras Presidency.

Area of plantations and topes, 1914–15.

District.	Area in acres.				Expenditure during the year.		Total expenditure from commencement.		Revenue during the year.	Total revenue from date of creation of plantation.
	On 1st July 1914.	Added during the year.	Excluded during the year.	Area on 30th June 1915.	Creation.	Upkeep.	Creation.	Upkeep.		
Northern Circle.										
A.—Regular Plantations.										
	ACS.	ACS.	ACS.	ACS.	RS.	RS.	RS.	RS.	RS.	RS.
Ganjām	(c) 412	..	..	(c) 412	(d) ..	(e) 54	(f)28,199	(g) 12,918	5,400	23,216
Vizagapatam	78	..	27	51	..	..	..	5	295	2,885
Gōdāvari, Lower	875	..	457	418	..	630	50,048	23,105	38,613	1,29,177
Kistna	917	..	604	313	..	398	19,540	58,960	25,969	93,002
Kurnool, East	130	..	..	130	..	504	38,471	25,538	..	..
Do. South	* ..	..	..	..	..	..	..	..	..	..
Do. West	1,255	123	..	1,378	18,384	16,996	2,72,826	50,046	3,317	12,657
Total ..	3,667	123	1,088	2,702	18,384	18,582	4,09,084	1,70,572	73,594	2,60,937
B.—Taungya Plantations—Nil.										
C.—Cultural Operations										
Ganjām	419	..	..	419	..	130	2,268	633	..	..
Vizagapatam	44	..	..	44	6	4	375	97	..	..
Gōdāvari, Upper	829	..	..	829	..	..	2,225	830	..	145
Do. Lower	2,402	..	..	2,402	..	..	2,359	1,032	..	..
Kistna	3,726	304	427	3,603	436	83	8,774	3,662	8,654	45,094
Kurnool, East	33	..	..	33	..	..	9,919	3,561	..	..
Do. South	300	19	..	319	652	32	* 7,721	* 917	..	..
Do. West	2,418	20	..	2,438	..	..	21,274	118	..	..
Total ..	10,171	343	427	10,087	1,094	249	54,915	10,850	8,654	45,239
Total, Northern Circle ..	13,838	466	1,515	12,789	19,478	18,831	463,999	1,81,422	82,248	3,06,176
Central Circle.										
A.—Regular Plantations.										
Bellary	579	..	..	579	..	308	9,423	62,455	..	14
Anantapur	..	..	..	..	..	..	..	..	..	..
Guntūr	(a)2,951	..	117	2,834	..	1,356	51,814	32,519	13,189	42,422
Cuddapah, West	10	..	..	10	..	..	560	..	..	..
Do. East	8	..	..	8	..	83	..	267	1,232	1,425
Nellore	(a)4,624	..	664	3,960	..	4,188	1,56,705	15,408	69,000	5,66,774
Chingleput	356	..	..	356	..	240	8,103	5,741	663	11,358
Chittoor	..	..	..	..	..	..	..	..	..	..
Total ..	8,528	..	781	7,747	..	6,175	2,26,605	1,16,390	84,084	6,21,993
B.—Taungya Plantations—Nil.										
C.—Cultural Operations.										
Bellary	20,690	..	.. (b)	20,690	..	314	84,252	11,031	..	..
Anantapur	70,977	196	70,977	196	271	..	39,915	593	..	274
Guntūr	(a) ..	..	..	..	..	..	348	..	..	..
Cuddapah, West	1,713	..	..	1,713	..	..	855	136	560	3,100
Do. East	1,791	..	..	1,791	..	325	492	1,879	670	698
Nellore	(a) 116	..	..	116	..	7	2,276	12	..	..
Chingleput	14,583	..	..	14,583	..	427	2,715	4,826	..	..
Chittoor	230	47	..	277	187	126	583	986	184	285
Total ..	110,100	243	70,977	39,366	458	1,199	1,31,436	19,463	1,414	4,357
Total, Central Circle ..	118,628	243	71,758	47,113	458	7,374	3,58,041	1,35,353	85,498	6,26,350

* Correct figures furnished by the Collector.

(a) Revised figures furnished by Collectors.
(b) The Collector reports that this area has been dropped as there are no plantations in the area.
(c) Excludes 6½ acres belonging to Parlakimedi Maliahs.
(d) Excludes Rs. 17-4-0 spent on teak plantations in Parlakimedi Maliahs.
(e) Do. Rs. 123-8-0 do. do.
(f) Do. Rs. 17-4-0 do. do.
(g) Do. Rs. 217-7-10 do. do.

Area of plantations and topes, 1914–15—*cont.*

District.	Area in acres.				Expenditure during the year.		Total expenditure from commencement.		Revenue during the year.	Total revenue from date of creation of plantation.
	On 1st July 1914.	Added during the year.	Excluded during the year.	Area on 30th June 1915.	Creation.	Upkeep.	Creation.	Upkeep.		
					Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
SOUTHERN CIRCLE.										
A.—Regular Plantations.										
North Vellore	1,267 (*a*) −78	16	1,046	159	892	1,109	17,974	1,32,261	5,515	76,032
South do.	..	..	..	..	..	..	..	..	..	..
South Arcot	70	..	70	..	..	..	..	..	..	..
North Salem	(*b*)+143	..	..	143	168	..	8,928	..	..	..
South do.	553	..	222	331	..	..	33,433	(*c*) 8,648	596	(*c*) 10,339
Trichinopoly	146	..	..	146	..	25	34,561	9,853	1,002	34,578
Madura	672	610	..	1,282	3,113	1,037	38,789	6,944	170	2,328
Tinnevelly	1,798	7	..	1,805	172	393	3,610	6,693	..	..
Total	4,506 + 65	633	1,338	3,866	4,345	2,564	1,37,295	1,64,399	7,283	1,23,277
B.—Taungya Plantations.										
North Vellore	818 (*d*)−132	..	..	686	..	15	77	281	33	129
South do.	140	..	47	93	..	..	..	..	204	2,476
South Arcot	..	..	..	..	..	..	..	..	..	..
North Salem	..	..	..	..	..	..	..	..	..	..
South do.	..	..	..	..	..	..	..	..	..	..
Trichinopoly	..	..	..	..	..	..	..	..	..	
Madura	..	..	..	..	..	..	..	..	..	..
Tinnevelly	1	..	1	..	..	..	..	..	..	..
Total	959 −132	..	48	779	..	15	77	281	237	2,605
C.—Cultural Operations.										
North Vellore	840	..	..	840	43	89	63	98	1	579
South do.	821	..	.. (*e*)	821	..	39	267	149	..	..
South Arcot	5,169	..	5,169	..	..	..	..	..	..	..
North Salem	577	..	564	13	..	..	(*f*)..	(*f*) 1,255	12	(*f*) 557
South do.	816	20	..	836	39	71	2,005	1,206	..	152
Trichinopoly	..	..	..	..	..	..	..	..	..	..
Madura	13	..	13	..	..	..	..	..	..	..
Tinnevelly	3,456	210	..	3,666	61	641	4,774	821	..	..
Total	11,692	230	5,746	6,176	143	840	7,109	3,529	13	1,288
Total, Southern Circle	17,090	863	7,132	10,821	4,488	3,419	1,44,481	1,68,209	7,533	1,27,170
WESTERN CIRCLE.										
A.—Regular Plantations.										
South Canara	124	..	70	54	..	..	2,462	7,067	38	18,190
Malabar, North	871	2	..	873	32	827	15,272	18,732	999	1,939
Do. South	6,473 (*g*)+1	..	..	6,474	..	4,279	5,37,942	5,81,041	1,16,827	18,78,881
The Nilgiris	1,766 (*g*)−91	..	..	1,675	..	1,195	6,462	2,83,469	27,520	5,74,323
Coimbatore, Central	595	7	..	602	16	..	548	255	..	..
Do South	157	..	..	157	..	1,094	9,947	4,318	..	..
Total	9,896	9	70	9,835	48	7,395	5,72,633	8,44,882	1,44,384	24,73,283

(*a*) Area wrongly included in previous years.
(*b*) Omitted to be shown in previous years.
(*c*) Difference due to deduction of amounts for areas excluded in 1913–14.
(*d*) Correct figure furnished by the District Forest officer.
(*e*) Unsuccessful area under cultural operations abandoned.
(*f*) Difference due to exclusion of areas during the year.
(*g*) Rectification due to adoption of correct area.

Area of plantations and topes, 1914–15—*cont.*

District.	Area in acres.				Expenditure during the year.		Total expenditure from commencement.		Revenue during the year.	Total revenue from date of creation of plantation.
	On 1st July 1914.	Added during the year.	Excluded during the year.	Area on 30th June 1915.	Creation.	Upkeep.	Creation.	Upkeep.		
WESTERN CIRCLE—*cont.*										
B.—Taungya.										
	ACS.	ACS.	ACS.	ACS.	RS.	RS.	RS.	RS.	RS.	RS.
South Canara	1,193	..	..	1,193	..	..	46	52	..	..
Malabar, North	753	9	..	762	..	..	..	10,728	..	4,978
Total ..	1,946	9	..	1,955	..	..	46	10,780	..	4,978
C.—Cultural Operations.										
South Canara	..	..	..	..	..	..	..	(*a*) 191	..	..
Malabar, North	2,977	1,365	..	4,342	666	280	2,036	7,898	..	..
Do. South	215	..	..	215	..	27	2,291	1,347	..	..
The Nilgiris	97	..	..	97	..	248	367	29,762	..	..
Kollegal	6,670	310	..	6,980	14	..	446	149	..	..
Coimbatore, North	27,248	120	..	27,368	103	..	676	..	100	259
Do. Central	768	596	..	1,364	317	..	1,908	343	..	37
Do. South	1,181	..	..	1,181	..	223	2,187	1,323	..	..
Total ..	39,156	2,391	..	41,547	1,100	778	9,911	40,513	100	296
Grand Total, Western Circle	50,998	2,409	70	53,337	1,148	8,173	5,82,590	8,96,175	1,44,484	24,78,557
Total. Regular plantations ..	26,662	765	3,277	24,150	22,777	34,716	13,45,617	12,96,243	3,09,345	34,79,490
Total. Taungya	2,773	9	48	2,734	..	15	123	11,061	237	7,583
Total. Cultural operations ..	171,119	3,207	77,150	97,176	2,795	3,066	2,03,371	74,355	10,181	51,180
Grand Total, Presidency ..	200,554	3,981	80,475	124,060	25,572	37,797	15,49,111	13,81,659	3,19,763	35,38,253

(*a*) Cost incurred in sowing seeds broadcast in reserved forests.

ANNUAL

Forest Department, Madras

OUTTURN (in cubic feet solid) of Timber and Fuel

District.	Timber in the rough logs.					Timber in the rough poles.					Sawn or square timber.				
	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
NORTHERN															
I. Reserved	C. FT.	C. FT.	C. FT.		C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.		C. FT.	C. FT.
Ganjām	6,973	(*b*) 35,043	15,780	..	57,796	1,702	8,915	20,010	..	(*a*)30,627	1,685	..	..	..	1,685
Vizagapatam	1,830	61	..	..	1,891	..	1,711	200	..	1,911	..	..	..	..	..
Gōdāvari, Upper ..	658	..	..	..	658	..	..	..	..	..	..	..	..	..	..
Do. Lower ..	934	4,157	..	..	5,091	1,069	..	..	..	1,069	..	32	..	..	32
Kistna	..	4,489	..	..	4,489	..	768	..	..	768	..	..	..	..	..
Kurnool, East	5,206	12,040	..	..	17,246	10,000	1,018	..	..	11,018	4,531	1,020	..	..	5,551
Do. South	3,644	23,885	270	..	27,799	93	26,936	149	11	27,189	1,152	180	..	..	1,332
Do. West	31,750	140	..	..	31,890	30,495	..	447	787	31,729	44	..	..	..	44
Total, Reserved forests.	50,995	79,815	16,050	..	146,860	43,359	39,348	20,806	798	104,311	7,412	1,232	..	..	8,644
II. Leased															
III. Reserved															
Upper Gōdāvari ..	1,098	..	..	..	1,098	..	..	..	..	..	..	..	..	..	..
IV. Unreserved															
Ganjām	533	77,137	13,890	..	91,560	2,448	106,143	21,420	179,640	(*a*) 309 651	36,208	(*a*) 2,238	..	3,698	42,144
Vizagapatam	..	1,917	..	..	1,917	..	8,175	..	..	8,175	..	291	..	.	291
Upper Gōdāvari ..	35,860	50,787	1,056	..	87,703	3,744	2,174	1,025	.	6,943	..	..	..	..	..
Lower do.	36	56,262	..	..	56,298	473	..		..	473	..	10,123	..	.	10,123
Kistna	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.
Kurnool, East	..	13,378	..	..	13,378	..	2,208	..	..	2,208	..	.	..	..	..
Do. South	.		1,240	..	1,240	..	..	150	.	150	..	.	..		..
Do. West	966	1,540	..	..	2,506	23,558	..	..	.	23,558	45	.	..	..	45
Total, Unreserved lands.	37,395	201,021	16,186	..	254,602	30,223	118,700	22,595	179,640	351,158	36,253	12,652	.	3,698	52,603
Grand total ..	89,488	280,836	32,236	..	402,560	73,582	158,048	43,401	180,438	455,469	43,665	13,884	..	3,698	61,247
CENTRAL															
I. Reserved															
Bellary	27	..	..	..	(*a*) 27	2,041	5,650	..	..	7,691	..	..	..	..	..
Anantapur	32	1,845	1,485	..	3,362	..	..	..	..	..	..	..	..	..	..
Guntūr	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cuddapah, West ..	..	..	..	..	..	..	1 258	..	.	1,258	..	..	..	..	..
Do. East . ..	..	.	..	..	..	4,111	66,743	300	..	71,154	..	..	..	..	..
Nellore	398	2,202	..	..	2,600	..	..	..	..	..	..	..	..	..	..
Chingleput . ..	1,396	57,505	..	..	58,901	..	..	.	..	..	..	..	..	..	..
Chittoor	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	1,853	61,552	1,485	.	64,890	6,152	73,651	300	.	80,103	..	..	..	..	..

NORTHERN CIRCLE REMARKS.

Ganjām.

(*a*) Estimated at 60 cubic feet per cart load.

(*b*) Estimated at 15 cubic feet per tree.

Vizagapatam.

Of the total timber 130,019, 126,271 are estimates, 3,748 are actuals.

One cart being equavalent to 20 H. L. or 20 cubic feet.

Upper Gōdāvari.

Charcoal—*Nil.*

Timber and Fuel all actuals.

Lower, Gōdāvari.

	C. FT.
(*a*) Actuals .. .. .. Figures arrived at, at the rate of 1 anna per cubic foot by commission	258,165
	163,841
(*b*) Actuals .. .. .. Figures arrived at, at the rate of 3 pies per cubic foot by commission	308,223
	12,296

Kistna.

The figures shown in column 17 to 19 and 28 are of approximate estimate.

Kurnool, East.

All figures are actuals.

Kurnool, South.

Timber and fuel shown against purchasers are taken from their accounts.

Kurnool, West.

All figures are actuals.

* Excludes 1,085 cubic feet belonging to Parlākimedi Maliahs.
† Do. 3,563 do. do.
‡ Do. 436 do. do.

§ Excludes 5,084 cubic feet belonging to Parlākimedi Maliahs.
‖ Do. 18,446 do. do.
¶ Do. 23,650 do. do.

FORM No. 76.

Presidency.

during the year 1914–15, and Agency of Exploitation.

Miscellaneous.					Total timber.					Fuel.					
Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Total outturn.
(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
CIRCLE.															
Forests.															
C. FT.	C. FT.	C. FT.		C. FT.	C. FT. *	C. FT †	C. FT. ‡	C. FT.	C. FT. §	C. FT.	C. FT. ‖		C. FT.	C. FT. (*a*) and ‖	C. FT. ¶
(*a*) 900	..	..	..	900	11,260	43,958	35,790	..	91,008	3,000	555,485	..	..	558,485	649,493
..	7	..	..	7	1,880	1,779	200	..	3,809	105,100	2,155	..	..	107,255	111,064
251	..	..	..	251	909	..	..	..	909	..	..	..	..	..	909
1,849	194	..	..	2,043	3,852	4,383	..	..	8,235	39,631	1,332,970	..	..	1,372,601	1,380,836
..	9,084	..	..	9,084	..	14,341	..	..	14,341	47,600	1,244,827	..	..	1,292,427	1,306,768
2,179	..	..	..	2,179	21,916	14,078	..	..	35,994	261	48,040	..	..	48,301	84,295
1,314	1,771	..	..	3,085	6,203	52,772	419	11	59,405	65,974	40,278	..	330	106,582	165,987
2,970	..	..	..	2,970	65,259	140	447	787	66,633	16,549	71,160	..	154,506	742,215	808,848
9,463	11,056	..	..	20,519	111,229	131,451	36,856	798	280,334	778,115	3,294,915	..	154,836	4,227,866	4,508,200
Forests—Nil.															
Lands.															
1,684	26	..	..	1,710	2,782	26	..	..	2,808	..	..	..	..	..	2,808
Lands.															
6,000	156,440	..	..	(*a*) 162,440	45,189	341,958	35,310	183,338	605,795	7,980	296,188	..	427,359	(*a*) 731,527	1,337,322
500	115,326	..	..	115,826	500	125,709	..	..	126,209	..	21,152	..	..	21,152	147,361
11,158	..	..	..	11,158	50,762	52,961	2,081	..	105,804	2,000	197,873	..	..	199,873	305,677
211	354,901	..	..	355,112	720	421,286	..	..	(*a*) 422,006	..	320,519	..	..	(*b*) 320,519	742,525
280	144,099	11,216	..	155,595	280	144,099	11,216	..	155,595	.	52,313	..	..	52,313	207,908
..	..	..	..	..	..	15,586	..	.	15,586	..	5,903	..	..	5,903	21,489
..	53,610	..	..	53,610	..	53,610	1,390	..	55,000	..	96,108	..	..	96,108	151,108
13,997	..	..	..	13,997	38,566	1,540	..	..	40,106	80,840	174,880	..	..	255,720	295,826
32,146	824,376	11,216	..	867,738	136,017	1,156,749	49,997	183,338	1,526,101	90,820	1,164,936	..	427,359	1,683,115	3,209,216
43,293	835,458	11,216	.	889,967	250,028	1,288,226	86,853	184,136	1,809,243	868,935	4,459,851	..	582,195	5,910,981	7,720,224
CIRCLE.															
Forests.															
..	..	..	..	..	2,068	5,650	..	..	7,718	3,770	118,910	..	..	122,680	130,398
..	..	..	..	.	32	1,845	1,485	..	3,362	..	16,200	..	..	16,200	19,562
234	24,784	96	..	25,114	234	24,784	96	..	25,114	295	510,384	..	..	510,679	535,793
2,696	4,319	1,224	..	8,239	2,696	5,577	1,224	..	9,497	1,400	524,969	..	..	526,369	535,866
..	..	..	..	..	4,111	66,743	300	..	71,154	14,224	1,670,309	..	..	1,684,533	1,755,687
..	..	..	..	..	398	2,202	..	..	2,600	13,723	1,669,449	..	..	1,683,172	1,685,772
..	..	..	..	..	1,396	57,505	..	..	58,901	981	79,893	..	..	80,874	139,775
20	13,858	520	..	14,398	20	13,858	520	..	14,398	335	317,568	..	..	317,903	332,301
2,950	42,961	1,840	..	47,751	10,955	178,164	3,625	..	192,744	34,728	4,907,682	..	..	4,942,410	5,135,154

CENTRAL CIRCLE REMARKS

(*a*) SANDALWOOD (*Santalum album*).

In cases in which the volume or kind of produce has had to be calculated from the revenue received, the following methods have been adopted :—

Bellary.—Two-thirds of the timber removed is assumed to be of the first class and is valued at As. 6 per cubic foot, one-third is assumed to be of the second class and is valued at As. 4 per cubic foot. The volume of a palmyra tree is assumed to be 10 cubic feet and that of individual rafters and poles removed by contract, 1 cubic foot. Of the total volume of fuel removed on contract two-thirds are assumed to be green and are valued at As. 1½ per cubic foot and one-third is assumed to be dry and is valued at 1 anna per cubic foot.

Anantapur.—Revenue from timber and fuel is based on the assumption that a cart load contains 45 cubic feet and is worth Rs. 2-8-0 and Rs. 1-4-0, respectively.

Guntūr.—The volume of produce removed by contract from the coupes is calculated at a uniform rate of 1 cubic foot for each anna.

East and West Cuddapah and Chingleput.—All the figures of outturn of fuel and timber are stated to be actuals, although this can hardly be the case.

Nellore.—The figure in column 22 under "Reserved Forests" consists of two items (1) actuals and (2) estimates. The latter figure is 334·31 cubic feet which was arrived at by assuming one palmyra tree to be equal to 10 cubic feet. The figure in columns 19 and 23 has been arrived at in a similar fashion. The figure in column 28 is based on the assumption that As. 8 represents 20 cubic feet of fuel.

Chittoor.—All the figures in this statement except those under purchasers (timber and fuel) against unreserves are actuals. The excepted items are estimates calculated on the money value obtained from sale of trees on dharkast and waste lands at one anna per cubic foot of timber and three pies per cubic foot of fuel.

Outturn (in cubic feet solid) of Timber and Fuel

District.	Timber in the rough logs.					Timber in the rough poles.					Sawn or squared timber.				
	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free-grantees	Right holders.	Total.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
CENTRAL															
II. Leased															
Bellary	C. FT. 67	C. FT. ..	C. FT. ..	..	C. FT. (a) 67	C. FT. 49	C. FT. 4,685	C. FT. ..	..	C. FT. 4,734	C. FT. ..	C. FT. ..	..	..	C. FT. ..
Total ..	67	..	..	..	67	49	4,685	..	..	4,734	..	..	..	..	..
III. Reserved															
IV. Unreserved															
Bellary	..	..	..	..	..	..	41,037	51	..	41,088	..	..	.	..	..
Anantapur	..	290,799	2,880	.	293,679	..	..	..	..	..	..	..	..	..	..
Guntūr	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cuddapah, West ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Do. East.. ..	..	..	..	..	..	..	14,947	..	..	14,947	..	..	..	..	..
Nellore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chingleput	..	34,145	..	..	34,145	..	..	..	..	..	..	..	..	..	..
Chittoor	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	..	324,944	2,880	..	327,824	..	55,984	51	..	56,035	..	..	..	..	..
Grand total ..	1,920	386,496	4,365	..	392,781	6,201	134,320	351	..	140,872	..	..	..	..	..
SOUTHERN															
I. Reserved															
Vellore, North.. ..	1,122	..	..	..	1,122	..	240	..	..	240	..	..	..	..	..
Do. South.. ..	865	731	975	..	2,571	112	100	..	..	212	..	..	..	..	..
Arcot, South	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Salem, North	..	..	..	..	..	..	..	..	..	..	443	..	..	.	443
Do. South	421	..	..	..	421	1,135	139	..	..	1,274	1,324	..	..	..	1,324
Trichinopoly	..	434	..	.	434	..	3	..	..	3	120	..	..	..	120
Madura	2,080	291	23	..	2,394	..	..	..	..	..	..	..	..	..	..
Tinnevelly	115	10,323	..	..	10,438	729	15,424	35	..	16,188	1,485	8,433	..	..	9,918
Total of reserved forests.	4,603	11,779	998	..	17,380	1,976	15,906	35	..	17,917	3,372	8,433	..	..	11,805
II. Leased															
III. Reserved															
Trichinopoly	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
IV. Unreserved															
Vellore, North.. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Do. South.. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Arcot, South	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Salem, North	..	..	..	..	..	..	..	..	..	..	3,295	..	..	..	3,295
Do. South	228	4	..	..	232	..	1	..	..	1	..	..	..	..	..
Trichinopoly	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Madura	267	..	445	..	712	..	..	..	..	..	..	..	..	..	..
Tinnevelly	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total of unreserved lands.	495	4	445	..	944	..	1	..	..	1	3,295	..	..	..	3,295
Ab															
Vellore, North.. ..	1,122	..	..	..	1,122	..	240	..	..	240	..	..	..	..	..
Do. South.. ..	865	731	975	..	2,571	112	100	..	..	212	..	..	..	..	..
Arcot, South	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Salem, North	..	..	..	..	..	..	..	..	..	..	3,738	..	..	..	3,738
Do. South	649	4	..	..	653	1,135	140	..	..	1,275	1,324	..	..	..	1,324
Trichinopoly	..	434	..	..	434	..	3	..	..	3	120	..	..	..	120
Madura	2,347	291	468	..	3,106	..	..	..	..	..	..	..	..	..	..
Tinnevelly	115	10,323	..	..	10,438	729	15,424	35	..	16,188	1,485	8,433	..	..	9,918
Total ..	5,098	11,783	1,443	..	18,324	1,976	15,907	35	..	17,918	6,667	8,433	..	..	15,100

SOUTHERN CIRCLE REMARKS.

Timber and fuel.—Government agency and free grantee.—Actuals.
Reserved forest—Purchasers—Timber.—Estimates based on the amounts realized.
Reserved forests and reserved lands—Purchasers—Fuel.—Estimates based chiefly on the accounts furnished by coupe contractors.
Unreserved lands—Timber and fuel—Purchasers.—Estimates based on the money value realized.

during the year 1914–15, and Agency of Exploitation—*cont.*

Miscellaneous.					Total timber.					Fuel.					Total outturn.
Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	
(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(c	(31)	(32)
CIRCLE—*cont.*															
Forests.															
C. FT.	C. FT.	C. FT.		C. FT.	C. FT.	C. FT.	C. FT.		C. FT.	C. FT.	C. FT.	C. FT.		C. FT.	C. FT.
..	..	..	..	..	116	4,685	..	..	4,801	1,335	56,225	..	..	57,560	62,361
..	..	..	..	..	116	4,685	..	..	4,801	1,335	56,225	..	..	57,560	62,361
Lands—Nil.															
Lands.															
..	..	..	..	..	..	41,037	51	..	41,088	..	535,900	..	..	535,900	576,988
..	..	..	..	..	..	290,799	2,880	..	293,679	..	103,104	..	..	103,104	396,783
..	181,456	10,625	..	192,081	..	181 456	10,625	..	192,081	..	158,112	..	..	158,112	350,193
..	54,061	..	.	54,061	.	54,061	..	..	54,061	..	331,909	..	..	331,909	385,970
..	..	..	..	..	..	14,947	..	..	14,947	..	62,845	..	..	62,845	77,792
..	54,578	9,319	..	63,897	..	54,578	9,319	..	63,897	..	47,829	..	..	47,829	111,726
..	..	1,096	..	1,096	..	34,145	1,096	..	35,241	..	78,190	..	..	78,190	113,431
..	194,740	10,947	..	205,687	..	194,740	10,947	..	205,687	..	287,961	..	..	287,961	493,648
..	484,835	31,987	..	516,822	..	865,763	34,918	..	900,681	..	1,605,850	..	..	1,605,850	2,506,531
2,950	527,796	33 827	..	564,573	11,071	1,048,612	38,543	..	1,098,226	36,063	6,569 757	.	..	6,605,820	7,704,046
CIRCLE.															
Forests.															
380	..	..	..	380	1,502	240	..	..	1,742	6,164	270,880	..	..	277,044	278,786
2,770	5,257	..	..	8,027	3,747	6,088	975	..	10,810	122	256,088	..	..	256,210	267,020
105	283	..	..	388	105	283	..	..	388	2,022	267,585	400	..	270,007	270,395
452	..	..	..	452	895	..	..	..	895	380	163,138	..	..	165,518	164,413
491	..	..	.	491	3,371	139	..	..	3,510	416	575,111	..	..	575,521	579,031
..	530	9,919	..	10,449	120	967	9,919	..	11,006	29,433	569,358	..	..	598,791	609,797
..	..	..	..	..	2,080	291	23	..	2,394	3,223	630,121	..	..	633,344	635,738
810	8,208	179	..	9,197	3,139	42,388	214	..	45,741	9,758	613,546	..	..	623,304	669,045
5,008	14,278	10,098	..	29,384	14,959	50,396	11,131	..	76,486	51,512	3,345,827	400	..	3,397,739	3,474,225
Forests—Nil.															
Lands.															
..	..	1,715	..	1,715	..	..	1,715	..	1,715	..	19,816	..	..	19,816	21,531
Lands.															
..	70,320	4,413	..	74,733	..	70,320	4,413	..	74,733	..	90,208	..	..	90,208	164,941
..	102,792	21,800	..	124,592	..	102,792	21,800	..	124,592	..	50,488	..	..	50,488	175,080
487	87,657	38,320	..	126,464	487	87,657	38,320	..	126,464	2,200	150,759	840	..	153,799	280,263
99	124,386	3,700	..	128,185	3,394	124,386	3,700	..	131,480	..	100,403	.	..	100,403	231,883
3	160,138	1,640	..	161,781	231	160,143	1,640	..	162,014	8,155	52,368	..	..	60,523	222,537
..	251,927	509	..	252,436	..	251,927	509	..	252,436	..	723,601	..	..	723,601	976,037
..	73,197	..	..	73,197	267	73,197	445	..	73,909	427	87,722	60	..	88,209	162,118
..	48	6,820	..	6,868	..	48	6,820	..	6,868	..	156,360	2,684	..	159,044	165,912
589	870,465	77,202	..	948,256	4,379	870,470	77,647	..	952,496	10,782	1,411,909	3.584	..	1,426,275	2,378,771
stract.															
380	70,320	4,413	..	75,113	1.502	70,560	4,413	..	76,475	6,164	361,088	..	..	367,252	443.727
2,770	108 049	21,800	..	132,619	3,747	108,880	22,775	..	135,402	122	306,576	..	..	306,698	442.100
592	87,940	38,320	..	126,852	592	87,940	38,320	..	126,852	4,222	418,314	1,240	..	423,806	550,658
551	124,386	3,700	..	128,637	4,289	124,386	3,700	..	132,375	380	263,541	..	..	263,921	396,29o
494	160,138	1,640	..	162,272	3,602	160,282	1,640	..	165,524	8,565	627,479	..	..	636,044	801,568
..	252,457	12,143	..	264 600	120	252,894	12,143	..	265,157	29,433	1,312,775	..	..	1,342,208	1,607,365
..	73,197	.	..	73,197	2,347	73,488	468	..	76 303	3,650	717,843	60	..	721,553	797,856
810	8,256	6,999	..	16,065	3,139	42,436	7,034	..	52,609	9,758	769,906	2 684	..	782,348	834,957
5,597	884.743	89,015	..	979,355	19,338	920,866	90,493	..	1,030,697	62,294	4,777,552	3,984	..	4,843,830	5,874,527

Outturn (in cubic feet, solid) of Timber and Fuel

Division.	Timber in the rough, logs.					Timber in the rough, poles.					Sawn or square timber.				
	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
WESTERN															
I. Reserved	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.		C. FT	C. FT.
South Canara ..	7,647	5,367	..	..	13,014	..	..	..	..	..	4,648	..	..	..	4,648
Malabar, North ..	3,282	..	36	..	3,318	640	..	..	..	640	83,550	35,199	..	..	118,749
Do. South ..	860	12,218	..	..	13,078	2,214	..	..	..	2,214	1,437	..	..	..	1,437
The Nilgiris ..	256	2,361	..	..	2,617	..	500	..	..	500	..	..	..	..	..
Kollegal	..	..	..	..	..	523	238	..	..	761	169	..	.	..	169
Coimbatore, North ..	477	..	..	..	477	..	..	..	..	..	6,148	179	..	..	6,327
Do. Central..	2,792	9,818	..	..	12,610	..	1,577	..	..	1,577	..	..		..	..
Do. South ..	..	..	..	..	..	295	137	..	..	432	14,991	12,465	..	..	27,456
Total ..	15,314	29,764	36	..	45,114	3,672	2,452	..	..	6,124	110,943	47,843		..	158,786
II. Leased															
Malabar, South ..	139,501	6,907	..	..	146,408	12,580	..	..	..	12,580	..	..	..	..	..
The Nilgiris ..	48,736	42	..	..	48,778	2,916	..	..	..	2,916	..	..	..	..	..
Coimbatore, South ..	..	..	..	..	..	..	..	..	..	..	92,418	672	..	..	93,090
Total ..	188,237	6,949	..	..	195,186	15,496	..	..	..	15,496	92,418	672	..	..	93,090
III. Reserved															
The Nilgiris ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
IV. Unreserved															
South Canara ..	538	153,211	2,048	36,175	191,972	..	..	..	..	..	..	4,185	..	..	4,185
Malabar, South ..	520	286	..	..	806	..	..	..	..	..	233	..	..	..	233
The Nilgiris ..	..	9,980	..	..	9,980	..	..	..	..	..	..	..	..	..	..
Kollegal	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Coimbatore, North ..	..	25,137	..	..	25,137	..	..	..	..	..	..	..	..	..	..
Do. Central..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Do. South ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	1,058	188,614	2,048	36,175	227,895	.	..	..	..	..	233	4,185	..	..	4,418
Grand total ..	204,609	225,327	2,084	36,175	468,195	19,168	2,452	..	..	21,620	203,594	52,700	..	..	256,294
Total, Presidency ..	301,115	904,442	40,128	36,175	1,281,860	100,927	310,727	43,787	180,438	635,879	253,926	75,017	..	3,698	332,641

REMARKS.—The figures are actuals except in the following cases:—

South Canara.

Outturn under all other agencies except "Government." — *Factor of conversion.* One tree = 25 cubic feet.

South Malabar.

Reserved forests columns 7 and 28 .. .. — One teak log = 25 cubic feet.

Leased forests columns 2, 7 and 17 .. .. — One windblown tree = 15 cubic feet.

Unreserved lands column 3 .. .. .. — Teak poles are roughly calculated as per standard measurements.

Kollegal.

Reserved forests columns 7 and 8 .. .. .. — Miscellaneous timber = 403 and 1,399 pieces at ·5 and ·4 cubic foot per piece.

Reserved forests column 17 .. .. .. — 5,138 quarters of sandalwood converted at half a cubic foot per quarter.

Unreserved lands column 28 .. .. .. — 13,262 cart loads converted at 10 cubic feet per cart load.

Central Coimbatore.

Unreserved lands .. .. — The sale amount is converted into yield in proportion to seigniorage rates.

during the year 1914-15 and Agency of Exploitation—*cont.*

Miscellaneous.					Total Timbers.					Fuel.					
Government.	Purchasers.	Free-grantees.	Right holders.	Total.	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Total outturn.
(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
CIRCLE.															
forests.															
C. FT.	C FT.	C. FT.		C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.
..	..	..	..	..	12,295	5,367	..	..	17,662	168,556	791,547	..	..	960,103	977,765
7	..	..	..	7	87,479	35,199	36	..	122,714	16,422	610	..	..	17,032	139,746
..	..	..	..	..	4,511	12,218	..	..	16,729	..	175	..	..	175	16,904
..	..	140	..	140	256	2,861	140	..	3,257	348,551	17,567	..	..	366,118	369,375
2,569	..	..	..	2,569	3,261	238	..	..	3,499	43,500	116,640	..	..	160,140	163,639
1,723	882	800	..	3,405	8,348	1,061	800	..	10,209	31,785	1,009,337	..	..	1,041,122	1,051,331
..	750	..	..	750	2,792	12,145	..	..	14,937	8,535	781,749	..	..	790,284	805,221
2,700	8,850	..	..	11,550	17,986	21,452	..	..	39,438	240	278,415	..	..	278,655	318,093
6,999	10,482	940	..	18,421	136,928	90,541	976	..	228,445	617,589	2,996,040	..	..	3,613,629	3,842,074
forests.															
2,059	..	..	..	2,059	154,140	6,907	..	..	161,047	22,560	..	..	..	22,560	183,607
..	..	..	..	..	51,652	42	..	..	51,694	..	..	..	..	..	51,694
692	..	..	..	692	93,110	672	..	..	93,782	..	..	..	..	..	93,782
2,751	..	..	..	2,751	298,902	7,621	..	..	306,523	22,560	..	..	..	22,560	329,083
lands.															
..	..	217	..	217	..	..	217	..	217	..	..	..	..	..	217
lands.															
..	..	..	..	..	538	157,396	2,048	36,175	196,157	..	485,725	340	..	486,065	682,222
..	..	..	..	..	753	286	..	..	1,039	..	..	..	..	..	1,039
..	..	..	..	..	..	9,980	..	..	9,980	..	362	..	..	362	10,342
..	25,945	..	..	25,945	..	25,945	..	..	25,945	..	132,620	..	..	132,620	158,565
..	..	440	..	440	..	25,137	440	..	25,577	..	13,919	..	..	13,919	39,496
..	151,980	..	..	151,980	..	151,980	..	..	151,980	..	308,640	..	..	308,640	460,620
..	..	80	..	80	..	..	80	..	80	..	..	..	..	..	80
..	177,925	520	..	178,445	1,291	370,724	2,568	36,175	410,758	..	941,266	340	..	941,606	1,352,364
9,750	188,407	1,677	..	199,834	437,121	468,886	3,761	36,175	945,943	640,149	3,937,306	340	..	4,577,795	5,523,738
61,590	2,436,404	135,735	..	2,633,729	717,558	3,726,590	219,650	220,311	4,884,109	1,607,441	19,744,466	4,324	582,195	21,938,426	26,822,535

ANNUAL FORM No. 77.

Forest Department, Madras Presidency.

OUTTURN of Minor Forest Produce during the year 1914–15.

Circle.	Description of produce.	Produce removed or utilised.					
		By Government Agency.		By purchasers.	By free-grants.	By right-holders.	Total.
		Quantity.	Value.	Value.	Value.	Value.	Value.
		NO.	RS.	RS.	RS.	RS.	RS.
Northern Circle ..	Bamboos	(a)351,783	6,550	(b) 93,180	(c) 671	552	(d) ,00,953
		MDS.					
	Grazing and fodder grass ..	..	..	1,20,502	16	1,079	1,21,597
	Grass (tharbi, korai, etc.). ..	24,903	191	962	2,762	..	3,915
	Tamarind, soapnuts, galnuts, nux-vomica, sheakoy, etc.	3,021	6,321	29,804	..	..	36,125
	Horns, honey, wax, resin, gum, skins, etc.	..	..	777	..	..	777
	Tangedu, etc., barks and fibres.	..	..	6,140	4	..	6,144
	Stone, gravel, earth, etc. ..	..	..	3,638	3	..	3,641
	Leaves for platters	..	..	244	..	..	244
	Date and palmyra leaves, stacks, etc.	240	32	149	..	..	181
	Manure leaves and thorns ..	..	..	299	..	..	299
	Miscellaneous, including tree-tapping and tree-owners' fees.	3,939	6,300	51,180	51	23,570	81,101
	Total, minor produce only ..	32,103	12,844	2,13,695	2,836	24,649	2,54,024
		NO.					
Central Circle ..	Bamboos	12,200	226	14,945	246	..	15,417
	Grazing and fodder grass ..	..	..	2,99,154	1,122	151	3,00,427
	Grass (thatch) and korai, etc. ..	MDS.	..	921	8	..	929
	Tamarind, soapnuts and gallnuts.	9,620	13,347	47,559	..	..	60,906
	Horns, honey, wax, gum, etc.	..	..	884	..	..	884
	Tangedu, vembadam, etc. ..	172	263	1,65,530	..	..	1,65,793
	Mica, stone, gravel, etc. ..	3,234	20	34,061	..	..	34,081
	Manure leaves, thorns, etc. ..	..	..	4,354	..	..	4,354
	Date, palmyra leaves, etc. ..	1,076	46	18,062	190	..	18,298
	Miscellaneous including tree-tapping and tree-owners' fees.	570	1,025	60,486	..	..	61,511
	Total ..	14,672	14,701	3,31,857	198	..	3,46,756
	Grand total ..	..	14,927	6,45,956	1,566	151	6,62,600
		NO.					
Southern Circle ..	Bamboos	3,702	201	1,01,789	303	..	1,02,293
		MDS.					
	Grazing and fodder grass ..	6	3	1,92,251	3,337	..	1,95,591
	Grass (thatch, korai, etc.) ..	666	8	3,022	50	383	3,463
	Dammer, cardamoms, etc. ..	8	81	5,690	..	..	5,771
	Tamarind, soapnuts, gallnuts, etc.	296	148	6,664	..	..	6,812
	Horns, honey, wax, gum, etc. ..	* 0	4	762	..	..	766
	Avaram, vembadam, etc., barks.	..	..	14,649	..	..	14,649
	Stones, gravel and earth ..	36,680	57	14,099	13	..	14,169
	Manure leaves, thorns, etc. ..	..	..	21,182	..	..	21,182
	Date, palmyra leaves, etc. ..	..	..	1,613	99	..	1,712
	Miscellaneous including tree-tapping fees.	2,149	230	1,17,283	1,768	1,722	1,21,003
	Total ..	..	732	4,84,004	5,570	2,105	4,92,411
Western Circle ..	*Reserved forests.*						
	Bamboos in number	72,841	3,818	20,728	17	..	24,563
	Grazing and fodder grass ..	..	..	84,312	91	780	85,183
	Other produce. (e)						
		QRS.					
	Grass (thatch, korai, etc.) ..	307	21	1,648	6	..	1,675
	Dammer, turmeric, pepper, cardamoms, etc.	74	212	1,603	..	..	1,815

(a) Excludes the value of 520 bamboos belonging to Parlākimedi maliahs.
(b) Do. 69,520 do. do.
(c) Do. 100 do. do.
(d) Do. 70,140 do. do.
(e) Do. Rs. 8,564 belonging to Parlākimedi maliahs.

Outturn of Minor Forest Produce during the year 1914-15—*cont.*

Circle.	Description of produce.	Produce removed or utilized.					
		By Government Agency.		By purchasers.	By free-grants.	By right-holders.	Total.
		Quantity.	Value.	Value.	Value.	Value.	Value.
		QRS.	RS.	RS.	RS.	RS.	RS.
	Tamarind, soapnuts, gallnuts, nux-vomica, sheakoy, etc.	5,388	5,993	3,520	..	..	9,513
	Horns, honey, wax, gum, resin, skins, etc.	479	4,650	5,441	..	..	10,091
	Avaram, vembadam, etc., barks and fibres.	..	..	3,008	..	..	3,008
	Stones, gravel, earth, etc. ..	..	..	1,068	..	..	1,068
	Manure leaves, thorns, etc. ..	..	..	463	..		463
	Date and palmyra leaves ..	..	..	510	..	..	510
	Miscellaneous	97	377	6,114	..	..	6,491
		6,345	11,253	23,375	6	..	34,634
	Total ..	..	15,071	1,28,415	114	780	1,44,380
	Leased forests.						
	Bamboos in number	25,916	1,555	551	21	..	2,127
	Grazing and fodder grass ..	..	..	621	..	..	621
	Other produce.						
		QRS.					
	Grass (thatch, korai, etc.) ..	..	..	15	..	..	15
	Dammer, turmeric, pepper, cardamoms, etc.	2	4	..	..	..	4
	Tamarind, soapnuts, gallnuts, nux-vomica, sheakoy, etc.	..	..	5	..	..	5
	Horns, honey, wax, gum, resin, skins, etc.	44	230	..	..	..	230
Western Circle—*cont.*	Stones, gravel, earth, etc. ..	..	..	159	..	..	159
		46	234	179	..	..	413
	Total ..	..	1,789	1,351	21	..	3,161
	Reserved lands.						
	Other produce.						
	Grass (thatch, korai, etc.) ..	..	..	..	7	..	7
	Unreserved lands.						
	Bamboos in number	..	..	835	29	..	864
	Other produce.						
		QRS.					
	Catechu	1,271	12,664	..	..	..	12,664
	Tamarind, soapnuts, gallnuts, nux-vomica, sheakoy, etc.	..	..	2,889	..	..	2,889
	Horns, honey, wax, gum, resin, skins, etc.	..	..	7	..	..	7
	Avaram, vembadam, etc., barks and fibres.	..	..	1,698	..	..	1,698
	Stones, gravel, earth, etc. ..	..	..	803	166	..	969
	Manure leaves, thorns, etc. ..	..	..	14	..	..	14
	Date and palmyra leaves ..	..	..	29	..	..	29
	Miscellaneous	..	..	33,087	..	..	33,087
		1,271	12,664	38,527	166	..	51,357
	Total ..	..	12,664	39,362	195	..	52,221
	Abstract from the Circle.						
	Bamboos in number	98,757	5,373	22,114	67	..	27,554
	Grazing and fodder grass ..	..	..	84,933	91	780	85,804
		QRS.					
	Other produce	7,662	24,151	62,081	179	..	86,411
	Grand total ..	..	29,524	1,69,128	337	780	1,99,769
		NO.					
	Bamboos	440,526	10,795	2,30,642	1,237	552	2,43,226
	Grazing and fodder grass ..	..	3	6,96,219	4,566	2,010	7,02,798
Total Presidency ..	Other produce	MDS. 86,574 QRS. 7,662	52,224	6,77,095	5,127	25,675	7,60,121
	Grand total, Presidency ..	..	63,022	16,03,956	10,930	28,237	17,06,145

ANNUAL FORM No. 78.

Forest Department, Madras Presidency.

ACCOUNT of timber and other produce cut or collected by Government Agency and brought to depôt, sold locally or otherwise disposed of during 1914-15.

District.	Balance at commencement of the year in forest and sale depôts.	Received during the year.	Total.	Disposed of during the year.	Balance on hand at close of the year in forest and sale depôts.
TIMBER (CUBIC FEET).					
Northern Circle.					
Ganjām	(*h*) 5,315	(*i*) 56,449	(*j*) 61,764	(*k*) 47,468	(*l*) 14,296
Vizagapatam	159	2,331	2,490	2,422	68
Gōdāvari, Upper	6,470	54,453	60,923	57,992	2,931
Do. Lower	272	4,572	4,844	4,517	327
Kistna	..	280	280	280	..
Kurnool, East	1,924	21,916	23,840	20,930	2,910
Do. South	12,482	6,203	18,685	18,187	498
Do. West	10,038	103,825	113,863	99,222	14,641
Total ..	36,660	250,029	286,689	251,018	35,671
Central Circle.					
Bellary	751	2,184	2,935	2,503	432
Anantapur	..	32	32	32	..
Guntūr	36	234	270	270	..
Cuddapah, West	794	2,696	3,490	2,382	1,108
Do. East	1,557	4,111	5,668	4,379	1,289
Nellore	321	398	719	393	326
Chingleput	37	1,396	1,433	1,369	64
Chittoor	..	20	20	20	..
Total ..	3,496	11,071	14,567	11,348	3,219
Southern Circle.					
Vellore, North	1	1,502	1,503	1,483	20
Do. South	5,045	3,747	8,792	4,888	3,904
Arcot, South	31	592	623	31	592
Salem, North	93	4,289	4,382	4,048	334
Do. South	440	3,602	4,042	3,280	762
Trichinopoly	* 42	120	162	123	39
Madura	* 1,145	2,347	3,492	2,342	1,150
Tinnevelly	155	3,139	3,294	2,882	412
Total ..	6,952	19,338	26,290	19,077	7,213
Western Circle.					
South Canara	8,263	12,833	21,096	6,888 (*a*) 2,377 (*b*) 298	11,533
Malabar, North	45,463 (*f*) + 912	87,479	133,854	97,950 (*a*) 3,352 (*b*) 14,182 (*c*) 385 (*e*) 2,129	15,856
Do. South	84,070	159,404	243,474	71,373 (*a*) 1,927 (*b*) 474	169,700
The Nilgiris	869	51,908	52,777	34,697 (*b*) 464	17,616
Kollegal	894 (*f*) — 2	3,261 (*c*) 385	4,538	876 (*d*) 2,496 (*a*) 326 (*b*) 37	803
Coimbatore North	5,309	8,348 (*d*) 2,496	16,153	8,580 (*a*) 2,407 (*b*) 768	4,398
Do. Central	839	2,792	3,631	2,373 (*b*) 20	1,238
Do. South	300,495	111,096	411,591	23,305 (*a*) 2,394 (*b*) 2,298	383,594
Total ..	447,112	440,002	887,114	282,376	604,738
Grand total ..	494,220	720,440	1,214,660	563,819	650,841

* Revised figure furnished by the Collector.
(*a*) Used departmentally.
(*b*) Written off the accounts.
(*c*) Transferred from North Malabar to Kollegal.
(*d*) Transferred from Kollegal to North Coimbatore.
(*e*) Transferred from Central Coimbatore to South Coimbatore.
(*f*) Deficit in conversion or re-measurement.
(*h*) Excludes 19 cubic feet belonging to Parlākimedi maliahs.
(*i*) Do. 817 do. do. do.
(*j*) Do. 836 do. do. do.
(*k*) Do. 717 do. do. do.
(*l*) Do. 119 do. do do.

Account of timber and other produce cut or collected by Government Agency and brought to depôt, sold locally or otherwise disposed of during 1914–15—*cont.*

District.	Balance at commencement of the year in forest and sale depôts.	Received during the year.	Total.	Disposed of during the year.	Balance on hand at close of the year in forest and sale depôts.
FUEL (CUBIC FEET).					
Northern Circle.					
Ganjam	1,189	10,980	12,169	11,119	1,050
Vizagapatam	* 2,650	105,100	107,750	107,278	472
Godavari, Upper	2,869	2,000	4,869	2,468	2,401
Do. Lower	3,645	39,631	43,276	43,276	..
Kistna	..	47,600	47,600	47,600	..
Kurnool, East	..	261	261	261	..
Do. South	341,105	65,974	407,079	242,895	164,184
Do. West	46,613	597,389	644,002	482,444	161,558
Total ..	398,071	868,935	1,267,006	937,341	329,665
Central Circle.					
Bellary	1,950	5,105	7,055	6,735	320
Anantapur	125	..	125	125	..
Guntur	2,610	295	2,905	2,905	..
Cuddapah, West	12,400	1,400	13,800	9,500	4,300
Do. East	31,086	14,224	45,310	42,484	2,826
Nellore	7,221	13,723	20,944	17,265	3,679
Chingleput	..	981	981	981	..
Chittoor	..	335	335	335	..
Total ..	55,392	36,063	91,455	80,330	11,125
Southern Circle.					
Vellore, North	1,732	6,164	7,896	7,856	40
Do. South	17,707	122	17,829	11,529	6,300
Arcot, South	849	4,222	5,071	4,921	150
Salem, North	..	380	380	380	..
Do. South	..	8,565	8,565	8,460	105
Trichinopoly	527	29,433	29,960	22,520	7,440
Madura	240	3,650	3,890	3,890	..
Tinnevelly	996	9,758	10,754	6,629	4,125
Total ..	22,051	62,294	84,345	66,185	18,160
Western Circle.					
South Canara	373,367	168,556	541,923	441,007 (a) 2,349 (b) 14,149	84,418
Malabar, North	18,308 (d) + 19	16,422	34,749	13,167 (b) 290 (c) 12	21,280
Do. South	..	22,560	22,560	16,396	6,164
The Nilgiris	185,503	348,551	534,054	319,697 (b) 1,152	213,205
Kollegal	242,490 (d)+ 2,100	43,500	288,090	183,110	104,980
Coimbatore, North	103,245	31,785	135,030	106,485	28,545
Do. Central	400	8,535	8,935	7,253	1,682
Do. South	46,700	240	46,940	38,275 (b) 7,510	1,155
Total ..	972,132	640,149	1,612,281	1,150,852	461,429
Grand total ..	1,447,646	16,07,441	30,55,087	22,34,708	820,379

* The difference in opening balance is due to revised figures furnished by Collector.

(*a*) Used departmentally.
(*b*) Written off the accounts.
(*c*) Deficit in conversion or re-measurement.
(*d*) Added or deducted as per revised figures furnished by Collectors.

Account of timber and other produce cut or collected by Government Agency and brought to depôt, sold locally or otherwise disposed of during 1914–15—*cont.*

District.	Balance at commencement of the year in forest and sale depôts.	Received during the year.	Total.	Disposed of during the year.	Balance on hand at close of the year in forest and sale depôts.
BAMBOOS (NUMBER).					
Northern Circle.					
Ganjām	(e) 2,205	9,820	(e) 12,025	(e)11,425	600
Vizagapatam	..	245,375	245,375	244,000	1,375
Gōdāvari, Upper	1,825	25,750	27,575	27,150	425
Do. Lower	..	26,820	26,820	26,820	..
Kistna	..	..	..	..	..
Kurnool, East	200	3,653	3,853	3,367	486
Do. South	92	35,015	35,107	33,507	1,600
Do. West	..	5,350	5,350	5,350	..
Total ..	4,322	351,783	356,105	351,619	4,486
Central Circle.					
Bellary	75	1,650	1,725	1,397	328
Anantapur	..	..	..	..	..
Guntūr	..	..	..	..	..
Cuddapah, West	..	..	..	..	..
Do. East	..	9,630	9,630	8,320	1,310
Nellore	..	..	..	..	..
Chingleput	..	..	..	..	..
Chittoor	..	920	920	920	..
Total ..	75	12,200	12,275	10,637	1,638
Southern Circle.					
Vellore, North	..	..	..	..	..
Do. South	..	..	..	..	..
Arcot, South	..	1,050	1,050	1,050	..
Salem, North	..	120	120	120	..
Do. South	..	650	650	350	300
Trichinopoly	..	..	..	..	..
Madura	..	..	..	..	..
Tinnevelly	459	1,882	2,341	2,341	..
Total ..	459	3,702	4,161	3,861	300
Western Circle.					
South Canara	2,024	3,810	5,834	4,059 (a) 175 (b) 764	836
Malabar, North	4,760	23,604	28,364	21,859 (a) 640 (b) 1,195 (c) 350	4,320
Do. South	12,517	45,741	58,258	30,047 (a) 3,325 (b) 247	24,639
Kollegal	37,008 (d) + 100	20,957	58,065	39,341 (a) 110	18,614
Coimbatore, Central	..	4,645	4,645	4,435	210
Total ..	56,409	98,757	155,166	106,547	48,619
Grand total ..	61,265	466,442	527,707	472,664	55,043

(a) Used departmentally.
(b) Written off the accounts.
(c) Deficit in conversion or re-measurement.
(d) Added or deducted as per revised figures furnished by Collectors.
(e) Excludes 1,764 bamboos belonging to Parlākimedi maliahs.

Account of timber and other produce cut or collected by Government Agency and brought to depôt, sold locally or otherwise disposed of during 1914–15—*cont.*

District.	Balance at commencement of the year in forest and sale depôts.	Received during the year.	Total.	Disposed of during the year	Balance on hand at close of the year in forest and sale depôts.
MINOR PRODUCE (MAUNDS OF 28 LBS.).					
Northern Circle.					
Ganjam	206	166	372	369	3
Vizagapatam	..	5,499	5,499	66	5,433
Godavari, Upper	39,796	9,468	49,264	9,101	40,163
Do. Lower	71	10,178	10,249	10,249	..
Kistna	130	451	581	379	202
Kurnool, East	1,701	3,095	4,796	3,020	1,776
Do. South	147	..	147	147	..
Do. West	482	3,246	3,728	3,008	720
Total	42,533	32,103	74,636	26,339	48,297
Central Circle.					
Bellary	1	..	1	1	..
Anantapur	10	7	17	9	8
Guntur	5,215	4,143	9,358	8,493	865
Cuddapah, West	..	..	..	..	..
Do. East	1,775	..	1,775	1,769	6
Nellore	4,309	10,522	14,831	13,947	884
Chingleput	92	..	92	92	..
Chittoor	..	..	..	..	..
Total	11,402	14,672	26,074	24,311	1,763
Southern Circle.					
Vellore, North	294	575	869	624	245
Do. South	3	..	3	3	..
Arcot, South	..	1,820	1,820	1,327	493
Salem, North	..	..	..	..	..
Do. South	..	..	..	..	..
Trichinopoly	8	358	366	38	328
Madura	7	..	7	7	..
Tinnevelly	..	37,052	37,052	37,049	3
Total	312	39,805	40,117	39,048	1,069
Western Circle.					
South Canara	1,179	1,271	2,450	(a) 1,551 (b) 899	..
Malabar, North	1	315	316	311	5
The Nilgiris	23	336	359	(a) 355 (b) 3	1
Kollegal	(d) 1,549 (d) — 41	1,780	3,288	(a) 1,435 (b) 19	1,834
Coimbatore, North	2,880	3,761	6,641	(a) 4,961 (b) 83	1,597
Do. Central	133	8	141	(a) 133 (c) 3	5
Do. South	105	(c) 191 (c) 3	299	(a) 132 (a) 16 (b) 49	102
Total	5,829	7,665	13,494	9,950	3,544
Grand total	60,076	94,245	154,321	99,648	54,673

(*a*) Used departmentally.
(*b*) Written off the accounts
(*c*) Transferred from Central Coimbatore to South Coimbatore.
(*d*) Added or deducted as per revised figures furnished by Collectors.

ANNUAL FORM No. 79.

Forest Department, Madras Presidency.

STATEMENT showing the value of timber and other produce at sale depôts for 1914–15.

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.	
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year
	Northern Circle.			RS.			RS.	RS.	RS.
Ganjām ..	Timber	..	(a) 3,217	(b) 2,033	..	(c) 9,025	(d) 6,209	(e) 4,176	..
	Fuel	..	96	3	..	..	..	..	3
	Bamboos ..	(f)2,205 MDS.	..	(g) 16	.. MDS.	..	..	..	16
	Minor produce ..	127	..	1,476	3	..	36	..	1,440
Vizagapatam.	Timber	..	143	48	..	68	20	..	28
	Fuel	..	* 152	19	..	472	59	40	..
	Bamboos ..	..	..	..	1,375	..	32	32	..
	Minor produce ..	..	..	..	..	..	..	..	..
Gōdāvari, Upper.	Timber	..	..	..	..	..	..	..	..
	Fuel	..	..	..	..	..	..	..	..
	Bamboos ..	..	..	..	..	..	..	..	..
	Minor produce ..	..	..	..	..	..	..	..	..
Gōdāvari, Lower.	Timber	..	..	.	.	..	..	..	..
	Fuel	..	..	.	..	..	..	..	..
	Bamboos ..	..	..	..	..	..	..	..	..
	Minor produce ..	..	..	..	..	..	..	..	..
Kistna ..	Timber	..	..	..	..	..	..	..	..
	Fuel	..	..	..	..	.	..	..	..
	Bamboos..	..	..	..	..	..	..	..	..
	Minor produce ..	..	..	..	..	..	..	..	..
Kurnool, East.	Timber	..	..	..	..	..	..	..	..
	Fuel	..	..	..	..	..	..	..	..
	Bamboos ..		..	..	..	..	..	..	..
	Minor produce ..	..	..	..	..	..	..	..	.
Kurnool, South.	Timber	..	12,482	9,361	..	498	527	..	8,834
	Fuel	..	341,105	15,792	..	164,184	6,552	..	9,240
	Bamboos ..	92 MDS.	..	2	1,600	..	21	19	..
	Minor produce ..	147	..	526	..	..	..	..	526
Kurnool, West.	Timber	..	..	..	..	..	..	..	..
	Fuel	..	27	10	..	1,469	275	265	..
	Bamboos ..	.. MDS.	..	..	.. MDS.	..	..	..	..
	Minor produce ..	345	..	77	637	..	288	211	..
	Central Circle.								
Bellary ..	Timber	..	..	..	..	..	..	..	..
	Fuel	..	1,950	56	..	..	..	..	56
	Bamboos ..	..	..	..	..	..	..	..	..
	Minor produce ..	..	..	..	..	..	..	..	..
Anantapur ..	Timber	..	..	..	..	..	..	..	..
	Fuel	..	125	8	..	..	..	..	3
	Bamboos ..	.. MDS.	..	..	..	..	..	..	..
	Minor produce ..	10	..	40	..	..	..	..	40

* The difference in opening balance is due to revised figures furnished by Collector.

(a) Excludes 19 cubic feet of timber belonging to Parlākimedi maliahs.
(b) Do. Rs. 28 being value of 19 cubic feet timber belonging to Parlākimedi maliahs.
(c) Do. 120 cubic feet of timber belonging to Parlākimedi maliahs.
(d) Do. Rs. 166 do. do.
(e) Do. Rs. 138 do. do.
(f) Do. 1,764 bamboos belonging to Parlākimedi maliahs.
(g) Do. Rs. 42-8-0 being the value of bamboos belonging to Parlākimedi maliahs.

Statement showing the value of timber and other produce at sale depôts for 1914–15—*cont.*

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.	
		Number	Cubic feet.	Value	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.
	Central Circle—cont.			Rs.			Rs.	Rs.	Rs.
Guntūr ..	Timber ..	..	..	..	..	..	..	..	..
	Fuel	..	..	..	..	..	..	..	..
	Bamboos ..	..	..	..	..	..	..	..	..
	Minor produce ..	MDS. 2,135	..	267	..	..	..	..	267
Cuddapah, West.	Timber	..	794	794	..	..	..	..	794
	Fuel	..	10,000	200	..	..	..	..	200
	Bamboos ..	..	..	..	..	..	..	..	..
	Minor produce ..	..	..	..	..	..	..	..	..
Cuddapah, East.	Timber	..	..	..	..	..	..	..	..
	Fuel	..	..	..	..	..	..	..	..
	Bamboos ..	..	..	..	..	..	..	..	..
	Minor produce ..	MDS. 1,436	..	370	..	..	..	..	370
Nellore ..	Timber	..	..	..	..	..	..	..	..
	Fuel	..	..	..	..	..	..	..	..
	Bamboos ..	..	..	..	..	..	..	..	..
	Minor produce ..	MDS. 3,949	..	1,268	MDS. 884	..	720	..	548
Chingleput.	Timber	..	..	..	..	..	..	..	..
	Fuel	..	..	..	..	..	..	..	..
	Bamboos ..	..	..	..	..	..	..	..	..
	Minor produce ..	..	..	..	..	..	..	..	..
Chittoor ..	Timber ..	..	81	13	..	..	..	..	13
	Fuel	..	..	..	..	..	..	..	..
	Bamboos ..	..	..	..	..	..	..	..	..
	Minor produce ..	MDS. 45	..	28	..	..	..	..	28
	Southern Circle.								
Vellore, North.	Timber	..	1	1	..	20	4	3	..
	Fuel	..	838	73	..	40	2	..	71
	Minor produce ..	..	..	..	MDS. 191	..	84	84	..
Vellore, South.	Timber	..	4,553	75,776	..	2,939	47,024	..	28,752
	Fuel	..	807	50	..	400	25	..	25
	Minor produce ..	MDS. 3	..	12	..	..	..	..	12
Arcot, South ..	....	..	..	..	..	..	..	..	..
Salem, North.	Timber	..	93	850	..	334	1,272	422	..
Salem, South.	Timber	..	440	524	..	762	956	432	..
	Fuel	..	..	..	..	105	2	2	..
	Bamboos ..	..	..	..	300	..	7	7	..
Trichinopoly *cum* Tanjore.	Timber	..	42	406	..	39	589	133	..
	Fuel	..	311	36	..	7,440	275	239	..
	Minor produce ..	MDS. 7	..	1	MDS. 328	..	155	154	..
Madura ..	Timber	..	1,061	398	..	1,150	424	26	..
	Fuel	..	240	15	..	..	..	..	15
	Minor produce ..	MDS. 7	..	19	..	..	..	..	19
Tinnevelly *cum* Ramnad.	Timber	..	142	188	..	412	784	596	..
	Fuel	..	1,016	56	..	4,125	237	181	..
	Bamboos ..	(*a*) 459	..	..	..	..	..	..	..
	Minor produce ..	MDS. (*b*)	..	4	MDS. 3	..	11	7	..

* Revised figure as per correct factor of conversion.

(*a*) Valueless being rotten. (*b*) Less than half a maund.

Statement showing the value of timber and other produce at sale depôts for 1914-15—*cont.*

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.	
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.
	Western Circle.			RS.			RS.	RS.	RS.
South Canara.	Timber	..	1,190	1,287	..	2,345	1,890	603	..
	Fuel	..	170,971	17,423	..	..	..	..	17,423
	Bamboos	449	..	49	..	..	..	..	49
North Malabar.	Timber	..	18,877	20,913	..	1,401	1,009	..	19,904
	Fuel	..	11,526	792	..	2,240	196	..	596
	Bamboos ..	3,565	..	321	1,441	..	130	..	191
	Minor produce ..	..	..	..	QRS. 5	..	228	228	..
South Malabar.	Timber	..	..	..	..	75	94	94	..
The Nilgiris.	Timber	..	847	256	..	330	161	..	95
	Fuel	..	53,291	4,260	..	28,958	2,461	..	1,799
Kollegal ..	Timber	..	428	285	..	660	360	75	..
	Fuel	..	240	5	..	..	..	..	5
	Bamboos	14,865	..	1,345	10,052	..	758	..	587
	Minor produce ..	QRS. 1,412	..	2,190	QRS. 1,304	..	1,530	..	660
North Coimbatore.	Timber	..	1,253	23,422	..	849	5,713	..	17,709
	Minor produce ..	QRS. 2,841	..	3,944	QRS. 1,597	..	2,243	..	1,701
Central Coimbatore.	Minor produce .	..	..	..	QRS. 5	..	401	401	..
South Coimbatore.	Timber		69,624	86,028	..	240	295	..	12,024
			(a)—62,515	—73,709					
	Fuel	..	43,720	897	..	..	..	..	897
	Minor produce ..	QRS. 3	..	1	..	..	..	..	1
	ABSTRACT.								
Northern Circle.	Timber	..	15,842	11,442	..	9,591	6,756	..	4,686
	Fuel	..	341,380	15,824	..	166,125	6,886	..	8,938
	Bamboos ..	2,297	..	18	2,975	..	53	35	..
	Minor produce ..	MDS. 619	..	2,079	MDS. 640	..	324	..	1,755
	Total value ..	..	..	29,363	..	..	14,019	..	15,344
Central Circle.	Timber	..	875	807	..	..	..	..	807
	Fuel	..	12,075	264	..	..	..	..	264
	Bamboos	..	..	..	..	..	..	..	..
	Minor produce ..	MDS. 7,575	..	1,973	MDS. 884	..	720	..	1,253
	Total ..	..	..	3,044	..	..	720	..	2,324
Southern Circle.	Timber	..	6,332	78,143	..	5,656	51,053	..	27,090
	Fuel	..	3,212	230	..	12,110	541	311	..
	Bamboos ..	459	..	..	300	..	7	7	..
	Minor produce ..	MDS. 17	..	36	MDS. 522	..	250	214	..
	Total value ..	..	..	78,409	..	..	51,851	..	26,558
Western Circle	Timber ..	..	29,704	58,482	..	5,900	9,522	..	48,960
	Fuel ..	..	279,742	23,377	..	31,198	2,657	..	20,720
	Bamboos ..	18,879	..	1,715	11,493	..	888	..	827
	Minor produce ..	QRS. 4,256	..	6,135	QRS. 2,911	..	4,402	..	1,738
	Total value ..	..	..	89,709	..	..	17,469	..	72,240
	Grand total ..	..	..	200,525	..	..	84,059	..	1,16,466

(a) Stock in forest depôts wrongly included in the last year's return.

ANNUAL FORM No. 80.

Forest Department, Madras Presidency.

SUMMARY of Revenue of the different districts for the Forest year 1914–15.

SUMMARY of Revenue of the different districts

Budget heads.	Northern Circle.						
	Direction.	Ganjam.	Vizagapatam.	Godavari, Upper.	Godavari, Lower.	Kistna.	Kurnool, East.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Receipts.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I. Timber and other produce removed from the forests by Government Agency—							
(a) Timber	6	23,516	1,711	9,451	113	..	3,171
(b) Firewood	52	110	4,032	92	3,898	12	1
(c) Bamboos	..	8	5,867	2	1	..	..
(d) Sandalwood	..	..	..	..	..	..	..
(e) Grass and other mino produce	..	1,704	40	118	72	140	6,257
II. Timber and other produce removed from the forests by consumers or purchasers—							
(a) Timber	8	30,305	5,314	4,308	52,754	8,509	3,734
(b) Firewood and charcoal	2	21,184	1,867	1,241	58,275	46,558	628
(c) Bamboos	..	6,211	8,109	9,941	45,125	3,514	302
(d) Grazing and fodder grass	..	11,461	5,255	9,269	14,025	12,788	31,872
(e) Other produce	..	2,619	11,005	854	28,610	9,727	1,443
(f) Tree-owner's fees	..	1,611	576	..	4,713	7,729	1,212
(g) Other items	..	..	..	..	..	..	..
(h) Commutation fees	..	..	..	28	..	..	..
III. Confiscated drift and waifwood	..	188	91	1,118	484	106	831
IV. Revenue from forests not managed by Government—							
(a) Revenue from shared and private forests.	..	..	..	..	..	..	..
V. Miscellaneous—							
(a) Fines and forfeitures	..	1,880	2,121	509	4,443	2,134	4,974
(b) Other sources	23	2,073	288	1,102	6,691	1,109	639
Total, Receipts	91	(a) 1,02,870	46,276	38,033	2,19,204	92,326	55,064

Budget heads.	Southern Circle.						
	Direction.	Working plans officer, Southern Circle.	Vellore, North.	Vellore, South.	Arcot, South.	Salem, North.	Salem, South.
	(22)	(23)	(24)	(25)	(26)	(27)	(28)
Receipts.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.
I. Timber and other produce removed from the forests by Government Agency—							
(a) Timber	..	..	36	511	68	2,860	791
(b) Firewood and charcoal	..	..	223	59	800	38	23
(c) Bamboos	..	..	..	..	54	21	..
(d) Sandalwood	..	..	..	* 65,199	..	29	2
(e) Grass and other minor produce	..	..	104	..	34	..	..
II. Timber and other produce removed from the forests by consumers or purchasers—							
(a) Timber	..	..	12,992	11,407	12,250	8,021	10,034
(b) Firewood and charcoal	..	..	23,743	14,440	1,83,553	6,872	15,445
(c) Bamboos	..	..	13,994	36,886	237	15,363	22,127
(d) Grazing and fodder grass	..	..	23,758	30,419	29,332	32,145	20,502
(e) Other produce	557	..	21,616	18,055	22,691	28,266	24,876
(f) Rents for trees tapped.	..	..	5,962	1,715	1,121	1,035	237
(g) Other items	..	..	..	..	42	621	..
(h) Commutation fees	..	..	..	..	..	..	448
III. Confiscated drift and waif-wood	..	..	79	403	249	223	92
IV. Revenue from forest not managed by Government—							
(a) Revenue from shared and private forests.	..	..	..	..	..	..	..
V. Miscellaneous—							
(a) Fines and forfeitures	..	..	14,317	12,310	22,659	7,849	11,698
(b) Other sources	5		838	837	685	2,243	4,876
Total, receipts	562	..	1,17,657	1,92,241	2,73,775	1,05,586	1,21,151

(a) Excludes Rs. 15,520 being revenue realized in Parlakimedi Maliahs.

* Includes sale-proceeds of sandalwood of other districts as shown below :—
Vellore, North, Rs. 20.
Trichinopoly, Rs. 244.

NOTE.—(*Southern Circle*).—Revenue under "Direction" is distributed as follows:—
II. (e) Vellore, North, Rs. 557.
V. (b) Vellore, South, Rs. 4.
Madura, Re. 1.

FORM No. 80.

Madras Presidency.

for the Forest year 1914–15.

			Central Circle.										
Kurnool, South. (9)	Kurnool, West. (10)	Total. (11)	Direction. (12)	Bellary. (13)	Anantapur. (14)	Guntūr. (15)	Cuddapah, West. (16)	Cuddapah, East. (17)	Nellore. (18)	Chingleput. (19)	Chittoor. (20)	Total. (21)
RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
8,698	19,834	66,500	..	309	..	4	544	1,707	11	39	15	2,629
9,936	12,641	30,774	..	317	5	55	73	1,210	3,230	46	73	5,009
84	5	5,967	..	1	2	..	..	3	..	..	..	6
..	..	..	..	364	..	..	..	..	..	..	..	364
117	1,586	10,034	..	1	..	156	..	1,054	14,563	..	15	15,819
15,454	203	1,20,589	..	12,406	16,261	12,913	6,584	14,117	8,638	9,028	12,440	92,387
8,141	12,130	1,50,026	..	9,732	3,315	33,434	9,416	20,664	1,09,217	14,034	15,720	2,15,532
25,009	11,630	1,09,841	..	212	..	..	3,245	5,081	7	92	4,610	13,247
8,975	26,395	1,20,040	..	46,788	34,001	84,774	17,878	18,181	61,901	13,236	22,395	2,99,154
6,838	11,163	72,259	..	48,863	97,023	17,917	14,659	7,960	27,022	12,519	44,928	2,70,891
2,335	13,774	31,950	..	18,493	13,124	5,396	1,686	1,861	4 630	3,675	2,542	51,407
..	..	..	..	..	..	..	..	228	..	..	..	228
..	..	28	..	..	..	..	..	..	..	..	..	..
2,022	673	5,513	..	174	346	230	706	816	716	92	137	3,217
..	..	..	..	..	..	..	..	..	..	..	..	..
7,136	7,762	30,959	..	10,103	10,475	18,682	5,615	9,521	14,454	6,802	7,389	83,041
1,702	2,286	15,913	321	848	344	1,301	484	3,197	29,124	773	797	37,189
96,447	1,20,082	7,70,393	321	1,48,611	1,74,896	1,74,862	60,890	85,630	2,73,513	60,336	1,11,061	10,90,120

				Western Circle.									
Trichinopoly *cum* Tanjore. (29)	Madura. (30)	Tinnevelly *cum* Ramnad. (31)	Total. (32)	Direction. (33)	South Canara. (34)	North Malabar. (35)	South Malabar. (36)	The Nilgiris. (37)	Kollegal. (38)	North Coimbatore. (39)	Central Coimbatore. (40)	South Coimbatore. (41)	Total. (42)
RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
..	16	402	4,684	..	3,253	76,437	1,14,719	10,224	163	398	..	36,097	2,41,291
925	199	171	2,438	..	30,185	859	587	27,519	5,149	3,196	161	583	68,239
..	..	42	117	..	430	1,736	2,748	..	913	..	54	..	5,881
86	..	..	65,316	95,749	11,987	..	..	2,730	..	6	10	..	1,10,482
3	176	143	460	39	13,193	65	..	870	2,999	6,114	642	961	24,883
15,761	4,688	2,663	77,816	..	20,502	16,702	3,558	1,258	8,880	4,040	4,852	1,628	61,420
1,24,722	26,426	73,425	4,68,626	..	21,660	5	9	2,415	1,078	8,975	26,882	4,577	65,601
2,287	2,610	417	1,03,921	..	2,708	135	983	2,360	370	7,825	5,115	804	20,300
27,638	21,604	6,858	1,92,251	..	11,165	2,568 / *—44	1	10,065	21,367	29,111	7,105	3,551	84,889
22,547	33,723	25,923	1,98,254	330	29,012	3,910 / *+44	2,280	2,713	3,819	4,067	8,706	3,725	58,606
209	..	..	10,279	..	1,531	..	..	..	22	..	..	..	1,553
..	..	..	663	..	..	..	..	..	..	..	..	..	..
..	..	..	448	..	..	..	..	..	..	..	..	..	..
272	815	1,354	3,487	..	4,174	686	10	12	80	122	529	553	6,166
..	..	..	..	..	..	..	..	..	..	..	..	..	..
15,864	10,940	6,668	1,02,305	..	11,777	32	314	786	2,416	3,799	4,806	1,891	25,821
1,482	1,383	1,836	14,186	1,05,616	7,360	8,715	2,938	4,320	1,572	2,655	1,739	1,741	1,36,956
2,11,797	1,02,580	1,19,902	12,45,251	2,01,734	1,68,937	1,11,850	1,28,147	65,272	49,128	70,308	60,601	56,111	9,12,088

* Adjustment of the erroneous credit referred to in the return for 1913–14.

(*Western Circle*).—The Revenue under Direction is distributed as follows :—

I (*d*) Nilgiris, Rs. 450 ; Kollegal, Rs. 42,622 ; North Coimbatore, Rs. 52,677.
I (*e*) South Malabar, Rs. 14 ; North Vellore, Southern Circle, Rs. 25.
II (*e*) Relates to South Coimbatore.

V (*b*) North Malabar, Rs. 2,077 ; South Malabar, Rs. 7,025 ; Nilgiris, Rs. 27,242 ; Kollegal, Rs. 5 ; North Coimbatore, Rs. 6 ; South Coimbatore, Rs. 69,020 ; Direction, Rs. 241.
South Malabar V (*b*) includes Rs. 1,000 relating to North Malabar.

SUMMARY of expenditure of the different districts for the Forest year 1914–15.

Budget heads.	Direction.	Ganjam.	Vizagapatam.	Godavari, Upper.	Godavari, Lower.	Kistna.	Kurnool, East.	Kurnool, South.	Kurnool West.	Total.
NORTHERN CIRCLE.	RS.	RS.	RS.	RS.	RS	RS.	RS.	RS.	RS.	RS.
I. Refunds and drawbacks ..	4	1,555	98	53	26	4,183	67	685	3,643	10,314
A. "Conservancy and Works."										
I. Timber and other produce removed from the forests by Government Agency—										
(*a*) Timber	..	8,211	319	1,930	20	..	884	2,147	8,568	22,079
(*b*) Firewood and charcoal ..	21	271	2,446	59	478	224	..	2,088	4,309	9,896
(*c*) Bamboos	..	63	2,470	..	280	..	34	44	..	2,891
(*d*) Sandalwood ..	..	..	..	..	..	..	..	..	..	..
(*e*) Grass and other minor produce..	..	418	..	..	4	200	997	80	2,100	3,799
II. Timber and other produce removed from the forests by consumers or purchasers ..	..	6,070	4,972	3,642	12,215	1,933	6,286	6,689	10,522	52,329
III. Confiscated drift and waifwood	..	43	..	122	1,807	4	10	83	17	2,086
IV. Revenue from forests not managed by Government	..	..	..	..	..	..	..	..	..	..
V. Rent of leased forests and payments to shareholders in forests managed by Government	..	..	949	..	..	..	..	..	..	949
VI. Live-stock, stores, tools and plant—										
(*a*) Purchase of cattle.	..	..	..	..	..	..	..	..	264	264
(*b*) Feed and keep of cattle	..	2,448	1,105	1,089	..	..	8	83	3,653	8,386
(*c*) Stores, tools and plant	102	207	121	2,391	4,919	4,772	491	305	631	13,939
VII. Communications and buildings—										
(*a*) Roads and bridges	..	4,956	121	2,853	2,801	2,460	10,504	7,944	694	32,333
(*b*) Buildings ..	19	6,774	1,534	5,092	5,469	632	5,497	3,091	3,108	31,216
(*c*) Other works ..	..	328	45	871	86	151	937	510	168	3,096
VIII. Demarcation, improvement and extension of forests—										
(*a*) Demarcation ..	..	2,620	247	899	1,640	316	285	284	1,135	7,426
(*b*) Cost of forest settlement; compensation for land and rights.	..	..	..	..	..	..	..	..	..	..
(*c*) Surveys	144	699	..	1,909	2,143	993	1,050	2,476	1,146	10,560
(*d*) Working plans ..	..	..	..	..	80	..	..	..	14	94
(*e*) Sowing and planting	1,155	181	11	210	305	917	503	685	37,883	41,850
(*f*) Protection from fire	..	5,705	2,070	6,999	4,440	1,246	13,185	13,639	17,989	65,273
(*g*) Other works ..	..	..	2	10	193	6,586	636	1,910	3,526	12,863
X. Miscellaneous—										
(*a*) Law charges ..	..	2	..	..	..	..	..	..	..	2
(*b*) Other charges ..	1,027	740	1	1	22	14	..	111	63	1,979
Total, A. "Conservancy and Works"	2,468	(*a*)39,736	16,413	28,077	36,902	20,448	41,307	42,169	95,790	3,23,310
B. "Establishments."										
I. Salaries—										
(*a*) Conservators	22,800	..	..	..	..	..	..	..	..	22,800
(*b*) Superior officers ..	2,212	9,924	15,291	10,340	7,800	6,427	6,994	8,697	14,245	81,930
(*c*) Subordinate Forest and Depot establishments.	..	21,752	7,322	13,459	45,143	9,794	15,279	21,998	21,957	1,26,704
(*d*) Office establishment ..	9,385	8,015	3,766	5,404	7,730	3,840	5,397	6,235	8,273	58,045
(*e*) Deputation and special allowances.	..	..	..	..	..	..	..	..	..	..

(*a*) Excludes Rs. 8,171 being expenditure incurred in the Parlakimedi Maliahs.

Summary of expenditure of the different districts for the Forest year 1914–15—*cont.*

Budget heads.	Direction.	Ganjam.	Vizagapatam.	Godavari, Upper.	Godavari, Lower.	Kistna.	Kurnool, East.	Kurnool, South.	Kurnool, West.	Total.
NORTHERN CIRCLE—*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
B. "*Establishments*"—cont.										
II. Travelling allowances—										
(*a*) Conservators ..	2,785	..	..	..	..	..	..	290	..	3,075
(*b*) Superior officers ..	138	2,573	1,003	2,422	1,236	1,242	2,233	2,210	3,824	16,881
(*c*) Subordinate Forest and Depot establishments.	..	5,575	2,007	3,697	4,883	3,042	5,771	6,845	6,630	38,450
(*d*) Office establishment.	1,075	2,170	1,043	1,283	1,751	1,098	1,873	1,216	1,748	13,257
III. Contingencies—										
(*a*) Rents, rates and taxes.	133	127	47	88	295	239	170	179	150	1,426
(*b*) Official postage and service telegrams.	1,174	1,228	692	859	1,423	1,174	888	975	1,359	9,772
(*c*) Telephone charges ..	..	..	..	..	..	..	..	..	..	..
(*d*) Sundries	10,461	2,113	1,206	1,323	3,393	1,343	2,101	1,460	2,126	25,526
Total, B. "Establishment".	50,163	(*a*)53,477	32,377	38,875	43,652	28,199	40,706	50,105	60,312	3,97,866
Grand Total of Expenditure A and B.	52,631	93,213	48,790	66,952	80,554	48,647	82,013	92,274	1,56,102	7,21,176

Budget heads.	Direction.	Bellary.	Anantapur.	Guntur.	Cuddapah, West.	Cuddapah, East.	Nellore.	Chingleput.	Chittoor.	Total.
CENTRAL CIRCLE.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I. Refunds and Drawbacks.	..	747	2,146	1,054	1,631	611	3,068	965	461	10,683
A. "*Conservancy and Works.*"										
I. Timber, etc., removed from the forest by Government Agency—										
(*a*) Timber ..	..	..	..		201	299	..	..	..	500
(*b*) Firewood and charcoal.	..	67	..	— 4	..	104	— 13	..	..	154
(*c*) Bamboos ..	..	..	..	..	..	..	..	..	..	..
(*d*) Sandalwood ..	..	119	..	..	..	..	..	..	..	119
(*e*) Grass and other minor produce.	..	..	..	33	..	237	3,581	..	..	3,851
II. Timber, etc., removed from the forests by consumers, or purchasers.	..	2,961	1,975	6,941	4,063	9,607	3,754	4,310	2,358	35,909
III. Confiscated drift and waifwood.	..	1	7	..	23	31	..	..	..	62
IV. Forests not managed by Government—										
(*a*) Shared and private forests.	..	..	..	..	..	..	..	..	..	..
V Rent of leased forests and payments to shareholders in forests managed by Government.	..	8,000	..	..	..	..	..	..	..	8,000
VI. Live-stock, stores, tools and plant—										
(*a*) Purchase of cattle.	..	..	..	..	..	..	..	..	66	66
(*b*) Feed and keep of cattle.	..	..	..	..	..	..	449	22	..	471
(*c*) Stores, tools and plant.	207	353	306	534	213	715	1,762	535	356	4,981
VII. Communications and buildings—										
(*a*) Roads and bridges.	..	795	1,274	39	308	7,754	1,669	1,272	2,559	15,670
(*b*) Buildings ..	..	1,674	6,241	1,961	2,749	13,381	3,404	1,868	2,232	33,515
(*c*) Other works ..	..	159	1,280	75	..	307	414	54	386	2,675

(*a*) Excludes Rs. 29,155 being the cost of establishment in Parlakimedi Maliahs

Summary of expenditure of the different districts for the Forest year 1914–15—*cont.*

Budget heads.	Direction.	Bellary.	Anantapur.	Guntur.	Cuddapah, West.	Cuddapah, East.	Nellore.	Chingleput.	Chittoor.	Total.
CENTRAL CIRCLE—*cont.*										
A. "*Conservancy and Works*" —cont.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
VIII. Demarcation, improvement and extension of forests—										
(*a*) Demarcation ..	..	1,421	1,830	937	678	2,520	1,792	1,314	2,711	13,203
(*b*) Cost of forest settlement; compensation for land and rights.	..	..	..	6,202	..	..	73	7	..	6,300
(*c*) Surveys (Local.	902	822	543	508	443	720	1,213	400	485	6,036
(*d*) Working plans.	675	..	..	..	..	..	..	..	..	675
(*e*) Sowing and planting ..	..	674	271	1,357	..	507	4,194	671	988	8,612
(*f*) Protection from fire ..	..	6,869	7,015	80	4,118	3,702	1,605	957	1,723	26,069
(*g*) Other works ..	..	13,547	11,319	9,787	4,156	3,649	6,684	8,666	13,648	71,456
IX. Miscellaneous—										
(*a*) Law Charges ..	..	..	..	..	..	..	565	..	..	565
(*b*) Other Charges.	..	135	969	128	232	330	386	96	52	2,328
Total A. "Conservancy and Works". ..	1,784	37,537	33,030	28,596	17,184	43,863	31,532	20,172	27,514	2,41,212
B. "*Establishments.*"										
I. Salaries—										
(*a*) Conservators ..	23,548	..	..	..	..	..	..	..	..	23,548
(*b*) Superior officers ..	3,862	15,468	16,393	5,468	3,159	11,330	18,706	3,802	19,983	98,171
(*c*) Subordinate Forest and Depot establishments.	1,122	19,000	16,744	12,102	13,790	19,287	19,049	6,866	14,829	1,22,789
(*d*) Office establishments.	9,080	5,890	5,647	5,854	4,791	6,407	13,327	3,455	5,618	60,069
(*e*) Deputation and special allowances.	..	..	..	..	..	..	..	..	..	..
(*f*) Exchange compensation allowances.	..	..	..	..	..	..	..	..	..	..
II. Travelling allowances—										
(*a*) Conservators ..	2,507	..	..	244	..	..	..	..	..	2,751
(*b*) Superior officers ..	138	1,514	1,324	1,567	1,254	2,173	1,880	1,599	2,353	13,802
(*c*) Subordinate Forest and Depot establishments.	111	5,170	5,422	3,821	4,231	4,831	4,206	1,973	3,935	33,700
(*d*) Office establishments.	763	1,420	1,502	1,223	849	1,114	2,719	779	929	11,298
III. Contingencies—										
(*a*) Rents, rates and taxes.	..	613	115	175	86	72	34	346	146	1,587
(*b*) Service postage and telegrams.	682	1,193	998	1,443	719	912	1,871	542	1,027	9,387
(*d*) Sundries	9,812	2,235	2,567	1,063	1,043	1,992	1,561	439	1,244	21,956
Total B. "Establishment".	51,625	52,503	50,712	32,960	29,922	48,118	63,353	19,801	50,064	3,99,058
Grand total of Expenditure.	53,409	90,040	83,742	61,556	47,106	91,981	94,885	39,973	77,578	6,40,27

Budget heads.	Direction.	Working plans officer, Southern Circle.	Vellore, North.	Vellore, South.	Arcot, South.	Salem, North.	Salem, South.	Trichinopoly *cum* Tanjore.	Madura.	Tinnevelly *cum* Ramnad.	Total.
SOUTHERN CIRCLE.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Refunds and Drawbacks.	..	..	1,631	367	763	768	1,038	1,100	2,944	1,506	10,117
A. "*Conservancy and Works.*"											
I. Timber and other produce removed from the forests by Government Agency—											
(*a*) Timber ..	..	..	5	236	..	1,065	538	..	..	41	1,885
(*b*) Firewood and charcoal.	..	..	..	28	..	18	..	549	..	63	658
(*c*) Bamboos ..	..	..	..	..	42	15	..	..	..	60	117
(*d*) Sandalwood ..	..	..	..	3,695	..	847	222	245	..	...	5,009
(*e*) Grass and other minor produce.	..	..	20	..	..	..	..	28	..	74	122
II. Timber and other produce removed from the forests by consumers or purchasers.	..	..	2,221	2,464	2,276	1,687	4,251	2,800	2,789	2,926	21,414

Summary of expenditure of the different districts for the Forest year 1914-15—*cont.*

Budget heads.	Direction.	Working plans officer, Southern Circle.	Vellore, North.	Vellore, South.	Arcot, South.	Salem, North.	Salem, South.	Trichinopoly *cum* Tanjore.	Madura.	Tinnevelly *cum* Ramnad.	Total.
SOUTHERN CIRCLE—*cont.*	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
A. "*Conservancy and Works*"—cont											
III. Confiscated drift and waifwood.	..	..	3	12	15	29	7	..	1	..	67
IV. Forests not managed by Government—											
(*a*) Shared and private forests.	..	..	..	..	..	..	..	..	..	..	..
V. Rent of leased forests and payments to shareholders in forests managed by Government.	..	..	..	..	..	..	..	..	..	..	..
VI. Live-stock, stores, tools and plant—											
(*a*) Purchase of cattle.	..	..	..	..	..	..	..	..	..	..	..
(*b*) Feed and keep of cattle.	..	..	..	3	..	..	..	..	..	..	3
(*c*) Stores, tools and plant.	376	3	154	161	345	919	480	228	283	421	3,370
VII. Communications and buildings—											
(*a*) Roads and bridges.	..	..	3,617	4,140	429	2,886	5,332	2,792	8,364	2,353	29,913
(*b*) Buildings ..	..	..	3,391	4,793	1,819	5,518	8,680	6,804	6,116	6,956	43,577
(*c*) Other works ..	..	..	167	526	80	712	505	80	863	882	3,815
VIII. Demarcation, improvement and extension of forests—											
(*a*) Demarcation ..	..	..	9	212	107	448	989	605	3,408	781	6,559
(*b*) Cost of forest settlement; compensation for land and rights.	..	..	2,886	17	..	..	121	..	1,377	..	4,401
(*c*) Surveys { Local.	610	..	405	502	398	1,188	1,257	556	1,097	1,256	7,269
(*c*) Surveys { India.	..	..	..	..	..	..	..	..	..	..	..
(*d*) Working plans.	..	5,165	..	..	..	..	..	..	..	..	5,165
(*e*) Sowing and planting.	..	..	2,173	40	252	265	116	1,607	5,702	1,221	11,376
(*f*) Protection from fire.	..	..	725	2,330	186	3,227	2,270	875	4,356	5,444	19,393
(*g*) Other works ..	..	..	8,148	7,639	6,938	6,676	5,754	9,634	12,435	6,226	63,450
IX. Miscellaneous—											
(*a*) Law charges ..	..	..	..	..	..	..	6	..	..	..	8
(*b*) Other charges ..	..	..	24	284	1	239	45	..	7	78	676
Total, A. "Conservancy and Works".	986	5,168	23,948	27,082	12,888	25,739	30,573	26,303	46,778	28,782	2,28,247
B. "*Establishment.*"											
I. Salaries—											
(*a*) Conservators ..	20,681	..	..	..	..	..	..	..	..	..	20,681
(*b*) Superior officers ..	2,212	9,329	6,686	11,850	3,987	17,710	6,950	6,473	19,071	15,000	99,268
(*c*) Subordinate Forest and Depot establishments.	1,720	2,815	10,579	14,203	9,632	13,861	13,099	14,161	18,581	18,032	1,16,713
(*d*) Office establishments.	8,145	1,835	3,565	5,725	5,101	6,335	5,328	6,464	6,455	5,331	54,284
(*e*) Deputation and Special allowances	..	..	..	..	..	..	..	..	..	..	..
(*f*) Exchange compensation allowance.	..	..	..	..	..	..	..	..	..	..	..
II. Travelling allowances—											
(*a*) Conservators ..	1,379	..	..	..	..	..	..	..	..	451	1,830
(*b*) Superior officers ..	138	3,028	1,017	2,083	1,344	2,291	1,498	1,372	3,777	924	17,472
(*c*) Subordinate Forest and Depot establishments.	246	1,336	2,614	3,487	3,147	4,293	3,123	4,073	5,144	5,039	32,502
(*d*) Office establishments.	679	914	429	988	983	839	559	846	1,849	994	9,080
III. Contingencies—											
(*a*) Rents, rates and taxes.	..	..	193	294	289	175	67	148	345	201	1,711
(*b*) Official postage and telegrams.	996	252	818	1,084	1,158	1,572	635	1,320	1,399	1,248	10,482
(*c*) Telephone charges.	..	..	..	..	..	..	..	..	..	..	..
(*d*) Sundries	9,733	1,672	780	928	797	1,756	1,052	1,081	1,918	829	20,546
Total, B. "Establishment."	45,929	21,211	26,681	40,642	26,437	48,832	32,311	35,938	58,539	48,049	3,84,569
Grand Total of Expenditure	46,915	26,379	50,629	67,724	39,325	74,571	62,884	62,241	1,05,317	76,831	6,12,816

Summary of expenditure of the different districts for the Forest year 1914-15—*cont.*

Budget heads.	Direction.	South Canara.	North Malabar.	South Malabar.	The Nilgiris.	Kollegal.	North Coimbatore.	Central Coimbatore.	South Coimbatore.	Total.
WESTERN CIRCLE.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Refunds and Drawbacks	..	4,265	399	21	138	107	12	360	906	6,208
A. "Conservancy and Works."										
I. Timber and other produce removed from the forests by Government Agency—										
(*a*) Timber	—135	1,261	7,299	6,093	4,688	168	66	5	8,695	28,140
(*b*) Firewood and charcoal.	..	5,880	414	345	19,180	1,328	794	527	50	28,518
(*c*) Bamboos	..	166	1,068	3,930	..	597	..	53	..	5,814
(*d*) Sandalwood ..	262	309	..	..	299	3,733	5,447	2	..	10,052
(*e*) Grass and other minor produce.	..	2,378	22	..	451	1,997	3,282	1	707	8,838
II. Timber and other produce removed from the forests by consumers or purchasers.	..	6,706	307	88	862	1,842	2,585	1,819	2,037	16,246
III. Confiscated, drift and waifwood.	..	111	96	680	..	..	2	11	33	933
V. Rent of leased forests and payments to shareholders in forests managed by Government.	..	..	36	1,317	7,381	..	..	..	2,500	11,234
VI Live-stock, stores, tools and plant—										
(*a*) Purchase of cattle.	..	996	2,073	1,241	4,509	..	..	..	3,861	12,680
(*b*) Feed and keep of cattle.	..	4,118	11,545	18,683	22,021	..	..	156	13,245	69,768
(*c*) Stores, tools and plant.	735	337	904	1,125	1,691	273	738	86	4,858	10,747
VII. Communications and buildings—										
(*a*) Roads and bridges.	..	2,905	5,316	3,527	9,980	3,231	10,805	2,957	8,582	47,303
(*b*) Buildings	2	4,778	6,002	6,652	2,271	2,521	10,253	2,937	6,050	41,466
(*c*) Other works ..	..	673	2,196	1,241	835	1,072	1,903	134	127	8,181
VIII. Demarcation, improvement and extension of forests—										
(*a*) Demarcation ..	..	1,408	55	24	300	1,125	2,863	796	84	6,655
(*b*) Cost of Forest Settlement; compensation for land and rights.	..	..	3	..	1,74,849	1,202	..	316	2,850	1,79,220
(*c*) Surveys { Local.	— 76	376	601	385	761	798	473	732	1,302	5,352
(*c*) Surveys { India.	..	..	..	..	..	..	..	..	..	..
(*d*) Working plans ..	..	78	..	79	90	..	..	6	..	253
(*e*) Sowing and planting.	554	— 2	2,033	4,506	1,443	14	103	333	2,024	11,008
(*f*) Protection from fire.	..	4,420	7,454	2,753	3,758	3,059	3,223	2,371	2,328	29,366
(*g*) Other works ..	..	882	2,104	1,650	1,258	3,378	4,583	4,938	2,231	21,024
IX. Miscellaneous—										
(*a*) Law charges ..	..	1	..	..	3	8	104	..	..	116
(*b*) Other charges ..	127	256	133	174	4,702	310	32	244	313	6,291
Total, A. "Conservancy and Works."	1,469	38,037	49,661	54,493	2,61,332	26,656	47,256	18,424	61,877	5,59,205
"B. Establishment.										
I. Salaries—										
(*a*) Conservators	21,363	..	..	..	..	..	..	..	..	21,363
(*b*) Superior officers ..	3,562	8,190	5,273	8,976	21,196	3,265	18,000	5,276	21,147	94,884
(*c*) Subordinate Forest and Depot establishments.	1,286	19,982	15,210	7,278	17,590	9,611	15,021	11,355	10,262	1,07,595
(*d*) Office establishments ..	9,763	7,096	6,771	5,071	6,813	4,181	5,601	4,539	6,545	56,380
II. Travelling allowances—										
(*a*) Conservators	2,237	..	..	..	..	..	..	..	..	2,237
(*b*) Superior officers ..	138	1,714	2,094	2,482	2,528	1,289	2,591	1,356	3,007	17,199
(*c*) Subordinate Forest and Depot establishments.	115	4,622	3,072	1,844	2,682	2,093	3,388	3,919	2,138	23,873
(*d*) Office establishments ..	576	1,072	763	813	607	695	850	743	848	6,967
III. Contingencies—										
(*a*) Rents, rates and taxes.	69	104	86	57	765	622	35	59	97	1,894
(*b*) Official postage and telegrams.	612	1,601	612	616	534	360	744	410	1,007	6,496
(*c*) Telephone charges ..	..	..	..	..	..	..	..	..	37	337
(*d*) Sundries	12,013	2,245	2,416	1,927	1,111	1,473	1,278	1,088	3,086	26,637
Total, B. "Establishment."	51,734	46,626	36,297	29,063	53,826	23,589	47,508	28,745	48,474	3,65,862
Grand Total of Expenditure A and B	53,203	84,663	85,958	83,556	3,15,158	50,245	94,764	47,169	1,10,351	9,25,067

SUMMARY of receipts and expenditure during 1914-15 for each Circle and for the Presidency compiled in the Board's office from the Conservators' statements.

Budget heads.	Northern Circle.	Central Circle.	Southern Circle.	Western Circle.	Grand total, Presidency—	
					1914-15.	1913-14.
1	2	3	4	5	6	7
RECEIPTS.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I. Timber and other produce removed from the forests by Government Agency—						
(a) Timber	66,500	2,629	4,684	2,41,291	3,15,104	2,74,157
(b) Firewood and charcoal ..	80,774	5,009	2,438	68,239	1,06,460	1,46,036
(c) Bamboos	5,967	6	117	5,881	11,971	20,305
(d) Sandalwood..	..	364	65,316	1,10,482	1,76,162	1,52,375
(e) Grass and other minor produce.	10,034	15,819	460	24,883	51,196	50,287
Total, I ..	1,13,275	23,827	73,015	4,50,776	6,60,893	6,43,260
II. Timber and other produce removed from the forests by consumers, etc.—						
(a) Timber	1,20,589	92,387	77,816	61,420	3,52,212	3,92,655
(b) Firewood and charcoal ..	1,50,026	2,15,532	4,68,526	65,601	8,99,785	7,91,394
(c) Bamboos	1,09,841	13,247	1,03,921	20,300	2,47,309	2,44,212
(d) Grazing and fodder grass..	1,20,040	2,99,154	1,92,251	84,889	6,96,334	6,81,893
(e) Other produce	72,259	2,70,891	1,98,254	58,606	6,00,010	7,44,103
(f) Tree-owners' fees	31,950	51,407	10,279	1,553	95,189	1,04,204
(g) Other items	..	228	663	..	891	1,030
(h) Commutation fees	28	..	448	..	476	2,082
Total, II ..	6,04,733	9,42,846	10,52,258	2,92,369	28,92,206	29,61,573
III. Confiscated drift and waifwood ..	5,513	3,217	3,487	6,166	18,383	22,024
IV. Revenue from forests not managed by Government.	..	..	..	..	..	..
V. Miscellaneous—						
(a) Fines and forfeitures ..	30,959	83,041	1,02,305	25,821	2,42,126	2,41,411
(b) Other sources	15,913	37,189	14,186	1,36,956	2,04,244	1,80,574
Total, V ..	46,872	1,20,230	1,16,491	1,62,777	4,46,370	4,21,985
Grand Total, Receipts ..	7,70,393	10,90,120	12,45,251	9,12,088	40,17,852	40,48,842
EXPENDITURE.						
1. Refunds and drawbacks	10,314	10,683	10,117	6,208	37,322	43,814
A. Conservancy and Works.						
I. Timber and other produce removed from the forests by Government Agency—						
(a) Timber	22,079	500	1,885	28,140	52,604	56,465
(b) Firewood and charcoal ..	9,896	154	658	28 518	39,226	93,636
(c) Bamboos	2,891	..	117	5,814	8,822	10,572
(d) Sandalwood	..	119	5,009	10,052	15,180	15,598
(e) Grass and other minor produce.	3,799	3,851	122	8,838	16,610	29,544
Total, A-I ..	38,665	4,624	7,791	81,362	1,32,442	2,05,815
II. Timber and other produce removed from the forests by consumers or purchasers.	52,329	35,909	21,414	16,246	1,25,898	1,29,449
III. Confiscated drift and waifwood ..	2,086	62	67	933	3,148	2,821
V. Rent of leased forests and payments to shareholders in forests managed by Government.	949	8,000	..	11,234	20,183	16,621
VI. Live-stock, stores, tools and plant—						
(a) Purchase of cattle ..	264	66	..	12,680	13,010	9,664
(b) Feed and keep of cattle ..	8,386	471	3	69,768	78,628	78,783
(c) Stores, tools and plant ..	13,939	4,981	3,370	10,747	33,037	32,863
Total, A-VI ..	22,589	5,518	3,373	93,195	1,24,675	1,21,310

Summary of receipts and expenditure during 1914-15 for each Circle and for the Presidency compiled in the Board's office from the Conservators' statements—*cont.*

Budget heads.	Northern Circle.	Central Circle.	Southern Circle.	Western Circle.	Grand total, Presidency.	
					1914-15.	1913-14.
1	2	3	4	5	6	7
EXPENDITURE—*cont.*	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
A. Conservancy and Works—cont.						
VII. Communications and buildings—						
(*a*) Roads and bridges ..	32,333	15,670	29,913	47,303	1,25,219	1,29,723
(*b*) Buildings	31,216	33,510	43,577	41,466	1,49,769	1,77,604
(*c*) Other works	3,096	2,675	3,815	8,181	17,767	29,111
Total, A-VII ..	66,645	51,855	77,305	96,950	2,92,755	3,36,438
VIII. Demarcation, etc.—						
(*a*) Demarcation	7,426	13,203	6,559	6,655	33,843	28,429
(*b*) Cost of settlement ..	..	6,300	4,401	1,79,220	1,89,921	18,750
(*c*) Surveys. (1) Local ..	10,560	6,036	7,269	5,352	29,217	30,097
(2) India ..						7
(*d*) Working-plans	94	675	5,165	253	6,187	3,199
(*e*) Sowing and planting ..	41,850	8,612	11,376	11,008	72,846	1,03,047
(*f*) Protection from fire ..	65,273	26,069	19,393	29,366	1,40,101	1,34,269
(*g*) Other works	12,863	71,456	63,450	21,024	1,68,793	1,77,029
Total, A-VIII ..	1,38,066	1,32,351	1,17,613	2,52,878	6,40,908	4,94,827
IX. Miscellaneous—						
(*a*) Law charges	2	565	6	116	689	506
(*b*) Other charges	1,979	2,328	678	6,291	11,276	10,859
Total, A-IX ..	1,981	2,893	684	6,407	11,965	11,365
Total, A. Conservancy and Works, including Refunds.	3,33,624	2,51,895	2,38,364	5,65,413	13,89,296	13,62,460
B. Establishments.						
I. Salaries—						
(*a*) Conservators	22,800	23,548	20,681	21,363	88,392	86,057
(*b*) Superior officers	81,930	98,171	99,268	94,884	3,74,253	3,52,736
(*c*) Subordinate forest and depôt establishments.	1,26,704	1,22,789	1,16,713	1,07,595	4,73,801	4,55,399
(*d*) Office establishments ..	58,045	60,069	54,284	56,380	2,28,778	2,18,104
(*e*) Deputation and special allowance.	..	..	..	..	..	..
Total, B-I ..	2,89,479	3,04,577	2,90,946	2,80,222	11,65,224	11,12,296
II. Travelling allowances—						
(*a*) Conservators	3,075	2,751	1,830	2,237	9,893	12,095
(*b*) Superior officers	16,881	13,802	17,472	17,199	65,354	54,594
(*c*) Subordinate forest and depôt establishments.	38,450	33,700	32,502	23,873	1,28,525	1,28,915
(*d*) Office establishment ..	13,257	11,298	9,080	6,967	40,602	38,611
Total, B-II ..	71,663	61,551	60,884	50,276	2,44,374	2,34,215
III. Contingencies—						
(*a*) Rents, rates and taxes ..	1,426	1,587	1,711	1,894	6,618	7,180
(*b*) Official postage and telegrams.	9,772	9,387	10,482	6,496	36,474	40,648
				* 337		
(*c*) Sundries	25,526	21,956	20,546	26,637	94,665	84,143
Total, B-III ..	36,724	32,930	32,739	35,364	1,37,757	1,31,971
Total, B. Establishments ..	3,97,866	3,99,058	3,84,569	3,65,862	15,47,355	14,78,482
Grand Total Expenditure including Refunds and Drawbacks.	7,31,490	6,50,953	6,22,933	9,31,275	29,36,651	28,40,942
Surplus	38,903	4,39,167	6,22,318	— 19,187	10,81,201	12,07,900
Total ..	7,70,393	10,90,120	12,45,251	9,12,088	40,17,852	40,48,842

* Telephone charges.

ANNUAL FORM No. 81.

Forest Department, Madras Presidency.

OUTSTANDINGS and Liabilities on account of Contractors and Disbursers for the Forest year 1914-15.

District.	Department debtor.			Department Creditor.			Balance due.	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To Department (Outstandings).	By Department (Liabilities).
Northern Circle.		RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	
Direction, Northern Circle ..	..	2,358 9 2	2,358 9 2	51 4 4	2,426 7 8	2,477 12 0	119 2 10	..
Ganjām	..	(a)86,768 15 5	(b) 86,768 15 5	2,979 1 1	86,365 14 7	89,344 15 8	2,576 0 3	..
Vizagapatam	..	33,855 10 7	33,855 10 7	703 10 9	34,136 14 1	34,840 8 10	984 14 3	..
Gōdāvari, Upper	..	49,874 10 8	49,874 10 8	1,297 12 2	49,609 9 7	50,907 5 9	1,032 11 1	..
Do. Lower	..	70,210 11 1	70,210 11 1	1,870 15 8	69,967 9 1	71,838 8 9	1,627 13 8	..
Kistna	..	35,741 9 11	35,741 9 11	1,221 5 3	35,571 14 3	36,793 3 6	1,051 9 7	..
Kurnool, East	..	82,411 3 10	82,411 3 10	2,266 0 1	82,360 3 11	84,626 4 0	2,215 0 2	..
Do. South	..	81,658 11 5	81,658 11 5	1,859 13 3	81,296 4 3	83,156 1 6	1,497 6 1	..
Do. West	..	1,97,780 13 0	1,97,780 13 0	1,584 9 4	1,99,160 4 11	2,00,744 14 3	2,964 1 3	..
Total ..	..	6,40,660 15 1	6,40,660 15 1	13,834 7 11	6,40,895 2 4	6,54,729 10 3	14,068 11 2	..
Central Circle.								
Direction, Central Circle ..	..	593 10 3	593 10 3	103 14 11	528 2 7	632 1 6	38 7 3	..
Bellary	..	64,958 4 0	64,958 4 0	1,450 14 8	64,504 13 1	65,955 11 9	997 7 9	..
Anantapur	..	73,597 4 6	73,597 4 6	1,520 13 10	72,883 1 11	74,403 15 9	806 11 3	..
Guntūr	..	44,829 0 5	44,829 0 5	776 10 5	44,351 11 3	45,128 5 8	299 5 3	..
Cuddapah, West	..	44,271 14 11	44,271 14 11	750 7 10	45,452 8 5	46,203 0 3	1,931 1 4	..
Do. East	..	97,055 0 2	97,055 0 2	2,153 5 9	97,096 10 3	99,250 0 0	2,194 15 10	..
Nellore	..	69,505 2 7	69,505 2 7	888 3 2	70,902 9 11	71,790 13 1	2,285 10 6	..
Chingleput	..	34,707 6 9	34,707 6 9	1,002 8 1	34,918 0 10	35,920 8 11	1,213 2 2	..
Chittoor	..	59,176 3 10	59,176 3 10	395 1 8	59,842 5 2	60,237 6 10	1,061 3 0	..
Total ..	..	4,88,693 15 5	4,88,693 15 5	9,042 0 4	4,90,479 15 5	4,99,521 15 9	10,828 0 4	..
Southern Circle.								
Direction, Southern Circle ..	..	1,288 13 7	1,288 13 7	64 6 8	1,245 10 3	1,310 0 11	21 3 4	..
North Vellore .. .	..	43,012 12 0	43,012 12 0	562 6 10	43,628 9 10	44,191 0 8	1,178 4 8	..
Do. South .. .	..	60,154 5 3	60,154 5 3	2,015 11 7	59,292 6 7	61,308 2 2	1153 12 11	..
Arcot, South	..	30,951 8 8	30,951 8 8	261 4 9	30,970 14 6	31,232 3 3	280 10 7	..
Salem, North	..	51,186 11 10	51,186 11 10	1,359 12 8	51,079 6 4	52,439 3 0	1,252 7 2	..
Do. South	..	59,695 3 5	59,695 3 5	2,277 3 4	60,482 7 7	62,759 10 11	3,064 7 6	..
Trichinopoly *cum* Tanjore ..	..	54,312 4 4	54,312 4 4	458 2 8	54,130 11 3	54,588 13 11	276 9 7	..
Madura	..	1,05,015 7 10	1,05,015 7 10	2,897 8 5	1,05,461 8 7	1,08,359 1 0	3,343 9 2	..
Tinnevelly *cum* Ramnād .	..	66,440 10 8	66,440 10 8	1,395 9 4	65,921 4 11	67,316 14 3	876 3 7	..
Working Plans officer, Trichinopoly.	..	17,621 5 0	17,621 5 0	697 6 3	17,294 6 0	17,991 12 3	370 7 3	..
Total .	..	4,89,679 2 7	4,89,679 2 7	11,989 8 6	4,89,507 5 10	5,01,496 14 4	11,817 11 9	..
Western Circle.								
Direction, Western Circle ..	..	868 13 5	868 13 5	54 7 8	871 13 3	926 4 11	57 7 6	..
South Canara	..	81,731 12 11	81,731 12 11	2,436 14 5	80,892 0 1	83,328 14 6	1,597 1 7	..
North Malabar	..	72,343 0 8	72,343 0 8	1,617 12 3	74,691 8 4	76,309 4 7	3,966 3 11	..
South do.	..	69,549 3 0	69,549 3 0	1,413 14 5	70,143 5 1	71,557 3 6	2,008 0 6	..
The Nilgiris	..	1,04,605 4 0	1,04,605 4 0	2,807 5 1	1,05,382 15 8	1,08,190 4 9	3,585 0 9	..
Kollegal	..	50,926 14 11	50,926 14 11	2,413 6 6	49,331 11 5	51,745 1 11	818 3 0	..
North Coimbatore	..	87,253 15 6	87,253 15 6	2,910 2 3	86,894 13 4	89,804 15 7	2,551 0 1	..
Central do.	..	44,108 9 4	44,108 9 4	2,146 4 1	43,607 1 7	45,753 5 8	1,644 12 4	..
South do.	..	80,252 3 0	80,252 3 0	2,041 15 8	81,061 4 8	83,103 4 4	2,851 1 4	..
Total ..	..	5,91,639 12 9	5,91,639 12 9	17,842 2 4	5,92,876 9 5	6,10,718 11 9	19,078 15 0	..
Grand Total, Presidency ..	..	22,10,673 13 10	22,10,673 13 10	52,708 3 1	22,13,759 1 0	22,66,467 4 1	55,793 6 3	..

(a) Excludes Rs. 17,535 belonging to the Parlakimedi Maliahs.
(b) Excludes Rs. 830 belonging to the Parlakimedi Maliahs.

ACCOUNTANT-GENERAL'S OFFICE,
MADRAS, 1st *September* 1915.

R. SRINIVASA AYYAR,
Deputy Accountant-General.

Annual Form No. 82.

Forest Department, Madras Presidency.

Revenue received and outstandings on account of revenue during 1914-15.

District.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the department at end of year.
Northern Circle.		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Direction	Timber and other forest produce.	..	91 0 0	91 0 0	91 0 0	..
Ganjam	Do.	(i) 11,559 11 10	(j) 99,122 5 2	(k)1,10,682 1 0	(l) 1,02,870 0 0	(a)(m)7,812 1 0
Vizagapatam	Do.	5,496 14 0	45,463 8 0	50,960 6 0	46,276 0 0	(b) 4,684 6 0
Gódávari, Upper	Do.	99 7 9	38,174 14 3	38,274 6 0	38,033 0 0	241 6 0
Do. Lower	Do.	16,622 8 0	2,31,876 8 11	2,48,499 0 11	2,19,204 0 0	(c) 29,295 0 11
Kistna	Do.	13,165 14 9	98,214 7 0	1,11,380 5 9	92,326 0 0 * 420 0 0	(d) 18,634 5 9
Kurnool, East	Do.	5,922 10 1	49,206 10 0	55,129 4 1	55,064 0 0	65 4 1
Do. South	Do.	3,808 12 5	1,03,913 11 6	(h)1,07,722 7 11	96,447 0 0	(e) 11,275 7 11
Do. West	Do.	8,508 8 8	1,17,388 7 4	1,25,897 0 0	1,20,082 0 0	5,815 0 0
	Total ..	65,184 7 6	7,83,451 8 2	8,48,635 15 8	7,70,393 0 0 * 420 0 0	77,822 15 8
Central Circle.						
Direction	Timber and other forest produce.	..	321 0 0	321 0 0	321 0 0	..
Bellary	Do.	45,663 5 3	1,14,492 8 8	1,60,155 13 11	1,48,611 0 0 (f)+ 120 0 0	11,424 13 11
Anantapur	Do.	2,24,698 11 9	88,527 9 0	3,13,226 4 9	1,74,896 0 0	1,38,330 4 9
Guntur	Do.	20,995 0 10 (g) — 112 8 0	1,62,623 1 2	1,83,505 10 0	1,74,862 0 0	8,643 10 0
Cuddapah, West	Do.	3,365 4 5	62,326 15 3	65,692 3 8	60,890 0 0 (f) + 4 6 2	4,797 13 6
Do. East	Do.	19,303 1 10	81,861 14 0	1,01,764 15 10	85 630 0 0	16,134 15 10
Nellore	Do.	94,795 9 6	2,07,272 12 10	3,02,068 6 4	2,73,513 0 0	28,555 6 4
Chingleput	Do.	6,287 8 0 (g) — 50 0 0	61,738 3 10	67,975 11 10	60,336 0 0	7,639 11 10
Chittoor	Do.	12,265 3 6	1,50,786 3 10	1,63,051 7 4	1,11,061 0 0	51,990 7 4
	Total ..	4,27,973 13 1 (g) — 162 8 0	9,29,950 4 7	13,57,761 9 8	10,90,120 0 0 (f) +124 6 2	2,67,517 3 6
Southern Circle.						
Direction	Timber and other forest produce.	..	562 0 0	562 0 0	562 0 0	..
Vellore, North	Do.	20,352 9 0	1,35,469 13 4	1,55,822 6 4	1,17,657 0 0	38,165 6 4
Do. South	Do.	35,272 1 10	2,39,023 10 7	2,74,295 12 5	1,92,241 0 0	82,054 12 5
Arcot, South	Do.	26,620 13 5	2,62,555 1 4	2,89,175 14 9	2,73,775 0 0	15,400 14 9
Salem, North	Do.	70,907 11 2	87,468 2 4	1,58,375 13 6	1,05,586 0 0	52,789 13 6
Do. South	Do.	30,853 6 0	74,760 5 7	1,55,613 11 7	1,21,151 0 0	34,462 11 7
Trichinopoly *cum* Tanjore ..	Do	28,765 7 2	1,92,727 7 0	2,21,492 14 2	2,11,797 0 0	9,695 14 2
Madura	Do.	14,582 11 0	1,15,427 14 8	1,30,010 9 8	1,02,580 0 0	27,430 9 8
Tinnevelly *cum* Ramnad ..	Do.	12,541 15 10	1,20,159 9 11	1,32,701 9 9	1,19,902 0 0	12,799 9 9
	Total ..	2,89,896 11 5	12,28,154 0 9	15,18,050 12 2	12,45,251 0 0	2,72,799 12 2
Western Circle.						
Direction	Timber and other forest produce.	..	241 0 0	241 0 0	241 0 0	..
South Canara	Do. ..	32,240 3 6	1,45,787 1 11	1,78,027 5 5	1,68,937 0 0 † 324 10 10	8,765 10 7
Malabar, North	Do. ..	4,525 0 3	1,22,089 15 1	1,26,614 15 4	1,14,927 0 0 † 76 14 0	11,611 1 4
Do. South	Do. ..	424 14 6	1,35,680 3 10	1,36,105 2 4	1,84,186 0 0	1,919 2 4
The Nilgiris	Do. ..	5,493 5 3	1,01,476 11 10	1,06,970 1 1	92,964 0 0 † 49 0 0	13,957 1 1
Kollegal	Do. ..	648 15 0	92,347 9 0	92,996 8 0	91,755 0 0	1,241 8 0
Coimbatore, North	Do. ..	5,189 5 6	1,30,391 12 7	1,35,581 2 1	1,22,991 0 0	12,590 2 1
Do. Central	Do. ..	11,229 4 10	70,552 15 10	81,782 4 8	60,601 0 0	21,181 4 8
Do. South	Do. ..	1,359 2 6	1,26,499 2 10	1,27,858 5 4	1,25,461 0 0	2,397 5 4
	Total ..	61,110 3 4	9,25,066 8 11	9,86,176 12 3	‡ 9,12,063 0 0 † 450 8 10	73,663 3 5
	Grand Total, Presidency.	8,44,002 11 4	38,66,622 6 5	47,10,625 1 9	40,18,821 15 0	6,91,803 2 9

* Written off the accounts as per Board's Proceedings, Forest No. 638, Rout., dated 27th July 1914.
† Written off the accounts. ‡ Excludes Rs. 25 relating to the North Vellore Division of the Southern Circle.
(*a*) Includes Rs. 1,612 due in 1915-16; Rs. 1,075 covered by deposit.
(*b*) Do. 4,385 due in 1915-16.
(*c*) Do. 26,089 do.
(*d*) Do. 18,048 do.
(*e*) Do. 7615 do.
(*f*) Amounts written off.
(*g*) Deductions on account of erroneous demand.
(*h*) Corrected in the Board's office.
(*i*) Excludes Rs. 545 belonging to Parlakimedi Maliahs.
(*j*) Do. 10,980 do.
(*k*) Do. 11,525 do.
(*l*) Do. 10,975 do.
(*m*) Do. 550 do.

Western Circle)—Out of the total outstanding of Rs. 73,663-3-5 the amount actually due on or before 30th June 1915 was Rs. 14,029-12-0.

ANNUAL FORM No. 83.

Forest Department, Madras Presidency.

FINANCIAL results of the year 1915–16.

District.	Timber and other produce removed from the forests by Government Agency.		Other Revenue.		Formation, protecti on and improvement of forests.	Total.	
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.
Northern Circle.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Ganjām	(a) 25,350	(b) 18,528	(c) 77,537	(d) 47,943	(e) 33,248	(f) 1,02,887	(g) 99,719
Vizagapatam	11,655	11,519	34,630	32,498	7,352	46,285	51,369
Gōdāvari, Upper ..	9,667	9,857	28,375	25,852	34,051	38,042	69,760
Do. Lower ..	4,084	7,116	2,15,124	65,606	21,595	2,19,208	94,317
Kistna	152	6,873	92,178	30,620	17,562	92,330	55,055
Kurnool, East ..	9,433	3,768	45,639	31,634	50,793	55,072	86,195
Do. South ..	18,848	7,208	77,615	45,287	46,237	96,463	98,732
Do. West ..	34,086	27,737	86,020	46,059	92,233	1,20,106	1,66,029
Total ..	1,13,275	92,606	6,57,118	3,25,499	3,03,071	7,70,393	7,21,176 (h)10,314
Central Circle.							
Bellary	992	186	1,47,940	58,089	39,776	1,48,932	98,051
Anantapur	7	..	1,74,889	51,696	40,056	1,74,896	91,752
Guntūr	215	29	1,74,647	37,368	29,501	1,74,862	66,898
Cuddapah, West ..	617	201	60,273	32,507	19,738	60,890	52,446
Do. East ..	4,004	640	81,626	63,500	35,852	85,630	99,992
Nellore	17,804	3,568	2,55,709	64,184	36,480	2,73,513	1,04,232
Chingleput	85	..	60,251	23,414	19,230	60,336	42,644
Chittoor	103	..	1,10,958	47,976	36,279	1,11,061	84,255
Total ..	23,827	4,624	10,66,293	3,78,734	2,56,912	10,90,120	6,40,270 (h)+10,683
Southern Circle.							
Vellore, North ..	383	115	1,17,851	27,884	26,304	1,18,234	54,303
Do. South ..	65,505	5,604	1,26,476	46,016	28,997	1,91,981	80,617
Arcot, South	956	192	2,72,819	31,322	11,477	2,73,775	42,991
Salem, North	2,948	3,664	1,02,638	55,866	36,515	1,05,586	96,045
Do. South	816	1,190	1,20,335	34,596	31,656	1,21,151	67,442
Trichinopoly *cum* Tanjore.	1,258	1,064	2,10,783	39,605	26,526	2,12,041	67,195
Madura	391	158	1,02,190	53,136	67,413	1,02,581	1,20,707
Tinnevelly *cum* Rāmnād.	758	585	1,19,144	47,974	34,957	1,19,902	83,516
Total ..	73,015	12,572	11,72,236	3,36,399	2,63,845	12,45,251	6,12,816 (i)+ 10,117
Western Circle.							
South Canara	59,048	23,692	1,09,919	50,426	21,449	1,68,967	95,567
Malabar, North ..	79,097	20,200	35,860	31,976	40,683	1,14,957	92,859
Do. South ..	1,18,068	47,966	16,148	10,550	31,700	1,34,216	90,216
The Nilgiris	41,793	74,998	51,261	13,264	2,33,717	92,994	3,21,979
Kollegal	51,846	12,278	39,940	20,599	24,113	91,786	56,990
Coimbatore, North ..	62,391	16,248	60,630	33,642	51,787	1,23,021	1,01,677
Do. Central ..	867	1,293	59,764	30,073	22,801	60,631	54,167
Do. South ..	37,641	29,735	87,850	52,044	36,041	1,25,491	1,17,820
Total ..	4,50,751	2,26,410	4,61,312	2,42,574	4,62,291	9,12,063 * 25	† 9,31,275
Grand Total, Presidency.	6,60,868	3,36,212	33,56,959	12,83,206	12,86,119	40,17,827	29,36,651

* Belongs to North Vellore division of the Southern Circle.

† Includes Refunds.

(a) Excludes Rs. 520 belonging to Parlakimedi Maliahs.
(b) Do. 242 do.
(c) Do. 14,958 do.
(d) Do. 23,887 do.
(e) Do. 5,026 do.
(f) Do. 15,220 do.
(g) Do. 29,155 do.
(h) Refunds and drawbacks.
(i) Refunds.

ANNUAL FORM No. 84.

Forest Department, Madras Presidency.

STATEMENT of elephants and other live-stock during 1914–15.

PART I.

District.	On hand at the commencement of the year.		Number received during the year.	Number disposed of during the year.	On hand at the end of the year.		Total expenditure on maintenance during the year.
	Number.	Value.			Number.	Value.	
(1) ELEPHANTS.							
Northern Circle.		Rs.				Rs.	Rs. A. P.
Ganjām ..	(a) 3	5,450	..	..	(a) 3	(b) 5,450	(c) 2,448 5 10
Vizagapatam	1	1,500	..	..	1	1,500	1,104 10 5
Gōdāvari, Upper	1	900	1	..	2	3,700	1,083 15 4
Kurnool, West	2	3,100	..	..	2	3,100	1,575 10 6
Total ..	7	10,950	1	..	8	13,750	6,212 10 1
Central Circle—Nil.							
Southern Circles—Nil.							
Western Circle.							
South Canara	..	..	8	..	8	17,150	1,485 5 7
Malabar, North	27	69,500	6	14	19	46,400	11,234 7 7
Do. South	24	81,800	3	4	23	76,100	13,654 11 6
The Nilgiris	48	1,04,000	20	14	54	1,37,900	20,363 12 7
Coimbatore, South ..	16	43,000	2	3	15	44,100	9,680 4 2
Total ..	115	2,98,300	39	35	119	3,21,650	56,418 9 5
Grand Total, Elephants ..	122	3,09,250	40	35	127	3,35,400	62,631 3 6
(2) OTHER LIVE-STOCK.							
Northern Circle.							
Kurnool, South	30	1,500	..	20	10	1,500	903 0 0
Do. West	..	..	21	1	20		1,260 10 10
Total ..	30	1,500	21	21	30	1,500	2,163 10 10
Central Circle.							
Chittoor	2	34	2	..	4	113	..
Southern Circle—Nil.							
Western Circle.							
South Canara	26	1,285	..	6	20	1,000	1,310 5 4
Malabar, North	2	200	..		2	200	463 12 10
Do. South	38	1,657	..	12	26	1,026	2,629 13 2
The Nilgiris	15	900	..	4	11	460	2,453 5 3
Coimbatore, South	39	1,970	18	14	43	3,421	5,072 9 2
Total ..	120	6,012	18	36	102	6,107	11,929 13 9
Grand Total (Other Live stock), Presidency.	152	7,546	41	57	136	7,720	14,093 8 7

(a) Excludes two elephants belonging to Parlakimedi Maliahs.
(b) Excludes Rs. 4,500 being the value of two elephants belonging to Parlakimedi Maliahs.
(c) Excludes Rs. 1,989 being the maintenance charges of the two elephants belonging to Parlakimedi Maliahs.

Elephants gone off the list during the year 1914-15.

Part II.

District.	Names.	When purchased or otherwise obtained by Government.	Age.	How disposed of.
		Elephants gone off during the year.		
		Northern Circle—Nil.		
		Central Circle—Nil.		
		Southern Circle—Nil.		
		Western Circle.		
			Yrs.	
Malabar, North.	1. Emily	Captured on 23rd June 1899	34	Transferred to South Canara.
	2. Meenakshi ..	Born in April 1889	27	
	3. Sivaji	Captured on 15th December 1900	42	Killed by a wild tusker elephant.
	4. Hanuman ..	Do. 21st February 1905	25	Transferred to South Canara.
	5. Parvathi ..	Born on 22nd November 1911	3	Sold.
	6. Kenchi ..	Captured on 12th March 1913	6	
	7. Sceptre ..	Do. 15th February 1914	6	
	8. Kumaran ..	Do. 11th April ,, ...	7	
	9. Damayanti ..	Do. 28th ,, ,, ...	26	
	10. Nala	Do. 28th ,, ,, ...	3	Transferred to the Nilgiris.
	11. Dhrona	Do. 2nd May ,, ...	9	
	12. Satyabhama ..	Do. 13th ,, ,, ...	31	
	13. Valmiki ..	Do. 13th ,, ,, ...	9	
	14. Narada	Do. 13th ,, ,, ...	5	
Malabar, South.	1. Saraswathi ..	Do. 16th April 1914	23	
	2. Hyder Ali ..	Do. 12th March 1906	14	
	3. Bhagavathi ..	Do. 16th ,, 1913	21	
	4. Ganapathi ..	Do. 3rd ,, 1914	4	
The Nilgiris.	1. Joe	Do. 11th January 1909	17	
	2. Shah Jehan ..	Do. 12th May 1911	17	
	3. Menaka ..	Do. 4th July ,, ...	6	
	4. Timur	Do. 3rd March 1912	6	Sold.
	5. Soma	Do. 6th June 1911	8	
	6. Clive	Do. 7th March 1913	4	
	7. Hastings ..	Do. 10th ,, ,, ...	6	
	8. Moyar	Do. 13th April ,, ...	8	
	9. Pykara .. .	Do. 24th ,, ,, ...	4	
	10. Dupleix ..	Do. 19th ,, ,, ...	8	
	11. Kantaraj ..	Do. 26th ,, 1914	2	
	12. Emperor ..	Do. 6th March 1909	15	Transferred to South Canara.
	13. Lawrence ..	Do. 7th ,, 1913 .. .	5	Transferred to South Malabar.
	14. Sceptre ..	Do. 15th February 1914	6	Died.
Coimbatore, South.	1. Kalyani ..	Purchased on 4th October 1889	68	Do.
	2. Kapila	Captured on 29th June 1908	31	Transferred to Upper Gōdāvari.
	3. Kaveri	Do. 25th October 1914	8	Died.

ANNUAL FORM No. 85.

Forest Department, Madras Presidency.

ABSTRACT showing the value of stores, tools and plants for 1914-15.

District.	Buildings.				Stores.				Total.				Difference in value.	
	On hand at the commencement of the year.		On hand at the end of the year.		On hand at the commencement of the year.		On hand at the end of the year.		On hand at the commencement of the year.		On hand at the end of the year.			
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	In favour of the year.	Against the year.
Northern Circle.		RS.		RS.		RS		RS.		RS.		RS.	RS.	RS.
Direction ..	1	740	1	1,600	333	3,352	418	2,879	334	4,092	419	4,479	387	..
Ganjām ..	147	55,048	149	56,214	(c)*2,488	(d)*8,545	(e)2,547	(f)7,918	2,635	63,593	2,696	64,132	(g) 539	..
Vizagapatam ..	86	11,044	88	10,952	* 1,351	* 2,877	1,473	2,753	1,437	13,921	1,561	13,705	..	216
Gōdāvari, Upper.	117	24,329	120	29,675	1,874	15,099	2,401	16,880	1,991	39,428	2,521	46,555	(a)7,127	..
Gōdāvari, Lower.	134	53,199	120	48,597	2,008	9,076	1,916	5,681	2,142	62,275	2,036	54,278	..	7,997
Kistna ..	63	6,651	51	5,825	2,417	8,484	1,533	7,669	2,480	15,135	1,584	13,494	..	1,641
Kurnool, East.	28	30,084	34	42,613	2,967	7,188	3,009	6,581	2,995	37,272	3,043	49,194	11,922	..
Do. South.	76	42,209	82	47,701	4,303	11,338	3,819	10,221	4,379	53,547	3,901	57,922	(a)4,375	..
Do. West.	*116	*1,01,408	110	85,448	* 5,820	* 14,681	5,460	13,137	5,936	1,16,089	5,570	98,585	..	17,504
Total ..	768	3,24,712	755	3,28,625	23,561	80,640	22,576	73,719	24,329	4,05,352	23,331	4,02,344	..	(b)3,008
Central Circle.														
Direction ..	..	..	..	..	240	2,930	243	2,787	240	2,930	243	2,787	..	143
Bellary ..	56	59,031	56	71,422	2,161	8,938	2,219	8,333	2,217	67,969	2,275	79,755	11,786	..
Anantapur ..	36	45,708	38	52,687	1,875	6,606	2,000	6,300	1,911	52,314	2,038	58,987	6,673	..
Guntūr ..	41	5,999	32	18,369	1,806	10,464	2,133	10,321	1,847	16,463	2,165	28,690	12,227	..
Cuddapah, West.	40	12,162	37	15,407	2,269	7,759	2,219	7,087	2,309	19,928	2,256	22,494	2,566	..
Cuddapah, East.	76	16,882	89	25,248	1,278	7,889	1,288	5,576	1,354	24,771	1,377	30,824	6,053	..
Nellore ..	43	33,878	43	33,160	44,697	42,615	44,795	38,817	44,740	76,493	44,838	71,977	..	4,516
Chingleput ..	41	11,218	33	10,934	1,707	5,348	2,474	12,040	1,748	16,566	2,507	22,974	6,408	..
Chittoor ..	45	17,950	52	18,198	2,493	5,917	2,572	5,944	2,538	23,867	2,624	24,142	275	..
Total ..	378	2,02,835	380	2,45,425	58,526	98,466	59,943	97,205	58,904	3,01,301	60,323	3,42,630	41,329	..
Southern Circle.														
Direction ..	..	..	..	..	159	2,934	178	2,715	159	2,934	178	2,715	..	219
North Vellore.	40	10,910	44	19,783	1,546	5,641	1,656	5,843	1,586	16,551	1,700	25,626	9,075	..
South do.	53	30,629	47	25,383	3,800	10,011	3,137	9,253	3,353	40,640	3,184	34,636	..	6,004
South Arcot ..	35	19,400	39	21,132	1,475	3,089	1,431	3,143	1,510	22,489	1,470	24,275	1,786	..
North Salem ..	85	41,928	88	43,286	1,931	7,529	2,397	6,400	2,016	49,457	2,485	49,686	229	..
South do. ..	52	26,188	56	32,273	2,508	7,033	2,618	6,870	2,560	33,221	2,674	39,143	5,922	..
Trichinopoly ..	35	16,751	30	20,782	3,481	10,239	3,054	8,722	3,516	26,990	3,084	29,504	2,514	..
Madura ..	107	69,791	111	73,697	3,439	6,795	3,372	6,809	3,546	76,586	3,483	80,006	3,420	..
Tinnevelly ..	83	43,055	83	47,870	1,929	4,866	1,907	4,703	2,012	47,921	1,990	52,573	4,652	..
Vernacular Training School.	..	..	..	..	335	1,481	499	1,677	335	1,481	499	1,677	196	..
Special working plans office	..	..	..	..	..	..	185	1,528	..	..	185	1,528	1,528	..
Total ..	490	2,58,652	498	2,84,206	20,103	59,618	20,434	57,163	20,593	3,18,270	20,932	3,41,369	23,099	..
Western Circle.														
Direction ..	1	78	1	74	844	6,309	380	4,987	845	6,387	381	5,061	..	1,326
South Canara .	50	24,099	53	24,657	2,010	9,129	2,053	7,272	2,060	33,228	2,106	31,929	..	1,299
Malabar, North	68	36,835	72	39,270	3,613	6,979	9,832	6,856	3,681	43,814	9,904	46,126	2,312	..
Do. South.	40	34,505	46	39,907	1,591	5,270	1,640	5,713	1,631	39,775	1,686	45,620	5,845	..
The Nilgiris ..	65	35,910	67	39,195	1,634	12,472	1,483	13,611	1,699	48,382	1,550	52,806	4,424	..
Kollegal ..	34	28,224	35	28,733	4,696	7,663	4,833	6,618	4,730	35,887	4,868	35,351	..	536
Coimbatore, North.	65	51,325	71	57,533	3,157	11,212	3,429	11,213	3,222	62,537	3,500	68,746	6,209	..
Do. Central	57	21,694	55	24,036	7,654	8,338	7,665	8,404	7,711	30,032	7,720	32,440	2,408	..
Do. South.	65	34,449	66	32,527	7,334	17,006	3,826	11,630	7,399	51,455	3,892	44,157	..	7,298
Vernacular Training School.	..	..	..	..	330	1,083	328	1,267	330	1,083	328	1,267	184	..
Total ..	445	2,67,119	466	2,85,932	32,863	85,461	35,469	77,571	33,308	3,52,580	35,935	3,63,503	10,923	..
Grand Total, Presidency.	2,081	10,53,318	2,099	11,64,188	135,053	3,24,185	138,422	3,06,658	1,37,134	13,77,503	140,521	14,49,846	72,343	..

* Correct figures furnished by the Collector.

(a) Corrected in the Board's office.

(b) Inserted in the Board's office.

(c) Excludes 563 items belonging to Parlākimedi Maliahs.

(d) Excludes Rs. 2,037 being the value of articles belonging to Parlākimedi Maliahs.

(e) Excludes 576 items belonging to Parlākimedi Maliahs.

(f) Excludes Rs. 2,303 being the value of articles belonging to Parlākimedi Maliahs.

(g) Excludes Rs. 266 in favour of the year on account of Parlākimedi Maliahs.

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

READ—the following paper:—

Proceedings of the Board of Revenue (Land Revenue), Forest No. 161, dated 17th November 1915.

The Hon'ble Mr. H. F. W. GILLMAN, I.C.S.,

Commissioner of Land Revenue and Forests.

The Board submits to Government the progress report of Forest Administration in the Madras Presidency for the year ending 30th June 1915.

2. *Alteration in area.*—Some 44 square miles mostly in *South Malabar* (35 square miles) and *Vizagapatam* (eight square miles) were constituted reserved forests during the year.

There were also the following changes: (1) an increase of five square miles by rectification of boundaries in *Kistna*, (2) a decrease of 26 square miles by disafforestation of 11 square miles in *Kistna*, eight square miles in *Bellary*, two square miles in *Nellore* and five square miles in the districts of *Chingleput*, *Chittoor*, *North Vellore* and *South Arcot*, (3) a decrease of six square miles by correct computation of areas in *Nellore* and of three square miles on account of re-computation of areas of the reserves investigated by the Special Deputy Collector, Madura. The net result of these changes was an increase of 14 square miles in the total area of reserved forests which stood at 18,877 square miles at the close of the year. The area of reserved lands fell from 802 to 762 square miles. About four square miles were newly notified under section 4 of the Forest Act mainly in the districts of *Vizagapatam* (one square mile) and *Trichinopoly* (two square miles). Forty-four square miles were notified under section 16.

3. *Forest settlement.*—As in previous years, forest settlement work was mostly carried out by Revenue Divisional officers. Fourteen blocks covering an area of 498·98 square miles were pending settlement at the close of the year in the Northern Circle of which *Upper Gōdāvari* alone accounted for eight blocks with an area of 352 square miles. The area is large and the Collector is requested to issue instructions to the Revenue Divisional officers concerned to push on with the settlement work as rapidly as possible.

4. *Demarcation.*—The total length of boundaries at the close of the year was 36,990 miles (or 28 miles less than in the previous year) of which 1,772 miles do not require artificial demarcation The total length of artificially-marked boundaries at the close of the year was 34,644 miles of which 246 miles were demarcated for the first time during the year, against 221 miles in 1913–14. Five hundred and seventy-four miles remained still to be demarcated at the close of the year, principally in the districts of *Kollegal* and *Madura*. The length of old boundaries repaired during the year was 19,433 miles against 18,148 miles in the previous year, of which 12,400 miles were cleared by subordinates free of cost against 14,922 miles in 1913–14. The average cost per mile of fresh demarcation rose from Rs. 31–8–3 to Rs. 33–10–6, and the cost of repairs fell from Rs. 6–4–11 to Rs. 3–6–3. The cost of fresh demarcation increased in the Central and Southern Circles and the cost of repairs in the Western. These variations have not been explained. Conservators are requested to

see that explanations are given in future reports. The Special Deputy Collector appointed to re-investigate the settlement of certain reserves in the Palni hills completed his work on 6th February 1915. The demarcation of the new boundary between the *Nilgiris* and *Central Coimbatore*, the object of which is to transfer the lower half of the Nilgiri slopes to Central Coimbatore, was started in April last by an Extra Assistant Conservator of Forests specially appointed for the purpose. The work, which is reported to be of the most arduous character, is estimated to take about two years, and the Conservator states that as the Nilgiri railway has taken to using coal instead of wood, for the supply of which the scheme was started, he sees no advantage in carrying out the proposed transfer. A separate report is being called for in the matter.

5. *Surveys.*—The Survey of India surveyed topographically on the 2 inch 1 mile scale about 66 square miles in *South Vellore*. In accordance with the decision of the Board of Forestry that only the more valuable forests where comparatively intense working is required should be surveyed on the 4″ scale, the Government of India have called for final lists of the forest areas in this Presidency which are to be so surveyed. Now that the classification of forests according to the Forest Committee's report is nearly complete, Conservators of Forests have been requested to compile lists of the forests placed in the classes I and II for which a special survey is required, distinguishing between those which have been already surveyed on the 2″ scale and those which have not been surveyed but including only those areas for which maps on the 2″ scale are considered inadequate. The receipt of these lists is awaited. The Special Map officer, Mr. Descubes, completed the maps of *Ganjām*, *Kistna* and *Nellore* and prepared those of *Vizagapatam*, *Lower Gōdāvari*, *Guntūr* and *North Malabar*. He has yet to prepare the map of *Upper Gōdāvari* and re-draw the maps of *Cuddapah*, *Salem*, *Madura*, *Rāmnād* and *Tinnevelly* with reference to the alteration of the boundaries of forest divisions.

The index map of the Madras Presidency showing the limits of controlling and executive charges prepared by the Forest Map officer, Dehra Dun, was published during the year. It is stated that the maps of *South Canara* and *North Coimbatore* were published during the year, that the map of *South Malabar* will shortly be printed and that the Nilgiri map which was reported last year to be in the press has not yet appeared.

Mr. Curtis of the Madras Survey department surveyed 12 square miles of the Estates on the Anamalais. In G.O. Mis. No 1007, Revenue, dated 29th April 1915, the period of his deputation was extended up to the 15th June 1915. The work that still remains to be done is expected to take two more seasons.

Miscellaneous work such as survey of coupes, alignments of roads and fire lines, verification of boundaries, determination of village boundaries in panchayat areas, and preparation of coupe and working plan maps was done by departmental surveyors.

Management of Forests.

(1) *Regulation and management.*

6. *Working plans.*—Working plans covering an area of 329 square miles were sanctioned during the year and plans were under preparation or revision for 2,921 square miles. The position in regard to working plans is unsatisfactory as a large proportion of those previously sanctioned are either unworkable or out of date and need revision while there is still a huge area of forest, 6,650 square miles, for which no working plans have as yet been attempted. The best progress was made in the Southern Circle where a special working plans officer and establishment were entertained and worked throughout the year. Mr. C. C. Wilson, the Working Plans officer, prepared working plans for the sandal forests of the Chitteris which was sanctioned during the year and of the Javadis which was sanctioned after the close of the year. The latter plan which was based on a complete enumeration of all the sandal trees in the area, is the best of its kind that has ever been made and has revealed the enormous potential value of this sandal forest. Mr. Wilson also prepared reconnaisance reports for

sandal forests in *North Salem* and fuel areas in *Madura* all of which have been approved by the Conservator. There was no working plan staff in any of the other circles and as the preparation of plans had to be attended to by the District Forest officers in addition to their other duties, the outturn was only moderate. In the Northern Circle a preliminary working plan for the forests of the Bhadrāchalam range in the *Upper Gōdāvari* division was sanctioned during the year but otherwise little progress was made. The preliminary working plans for Marrigudem range and for the Rajahmundry and Polavaram ranges in the *Lower Gōdāvari* division have been returned to the Conservator for revision with reference to the final classification of forests in that division. In the Central Circle useful plans were sanctioned for the red sanders forests in *East Cuddapah* and *Chittoor*. There is a good deal to be done in other districts of this Circle especially *Bellary* and *Guntūr* where there are no working plans in operation and *West Cuddapah* where the existing plans are useless. In the Western Circle Mr. Cox completed an elaborate plan for the Eucalyptus plantations on the *Nilgiris* which was sanctioned. Much other preliminary work was got through but there is still enough in this Circle to occupy a working plans section for many years especially in *South Canara* and the *Coimbatore* Forest divisions. Mr. Hart, Extra Assistant Conservator of Forests is reported to have prepared a working scheme for the extraction of over-mature timber in the ghat forest exploitable by the Kasaragod river.

7. The Board recognises the great importance of compiling plans with as little delay as possible for all areas for which they are required and in the proposals for the re-organisation of the Forest department which it is about to submit to Government, provision has been made for a working-plans officer for each circle.

(2) *Communications and Buildings.*

8. The following statement compares the expenditure during the year on the construction and maintenance of roads, bridges and buildings in the four circles with that of the previous year:—

—	Roads and bridges.		Buildings.	
	1913-14.	1914-15.	1913-14.	1914-15.
	Rs.	Rs.	Rs.	Rs.
Northern Circle	31,588	32,333	43,789	31,216
Central Circle	11,764	15,670	37,122	33,510
Southern Circle	41,120	29,913	56,803	43,577
Western Circle	45,251	47,303	39,890	41,466
Total ..	1,29,723	1,25,219	1,77,604	1,49,769

The total expenditure on roads and bridges fell by Rs. 4,504 and that on buildings by Rs. 27,835. The decreased expenditure is due to the restriction of allotments owing mainly to the war. The Board has tentatively approved since the close of the year schemes for the construction of roads and buildings prepared by the Conservators of Forests in accordance with Mr. Beadon Bryant's recommendations. In November 1914, Messrs. A. J. Bright and F. J. Marshall were appointed temporary Engineers for the investigation and execution of forest roads and were engaged, the former on the Mount Stuart ghat road and on the Tekkadi tram trace and the latter on the survey of a road from Alangayam to Patrakad in the Javadis hills. All these works present considerable engineering difficulties and are of prime importance for the exploitation of teak in Mount Stuart and sandal and bamboos on the Javadis. No work beyond re-tracing and estimating was done by either of the temporary Engineers. Considerable progress was made in opening up the red sanders forests of *East Cuddapah* and *Chittoor* with cart-tracks and bridle-paths.

The tramway in *Coimbatore* was extended and worked at a profit of Rs. 2,416 against a loss of Rs. 754 in the previous year. The outturn of work was greater while the working charges appreciably decreased. The tramway in Nellore was not used departmentally but was lent to fuel contractors on terms provided in the felling

contracts. In the Sriharikota range only 609 tons of fuel were carried against 7,602 tons in the previous year owing to the failure of the felling contractor to carry out his agreement.

9. *Miscellaneous works.*—The expenditure under this head also decreased from Rs. 29,111 to Rs. 16,767. The chief works consisted as usual in fencing compounds and reserves and construction of, and repairs to, tanks and wells.

(3) *Protection of forests.*

10. The following table compares the forest offences reported during the year with those of 1913–14 and with the average of the three years ending 1913–14 :—

—	Injury to forests by fire.		Unauthorized felling and removal of forest produce.		Unauthorized grazing.		Other offences.		Total.		Average for three years ending 1913–14.
	1913–14.	1914–15.	1913–14.	1914–15.	1913–14.	1914–15.	1913–14.	1914–15.	1913–14.	1914–15.	
A. Cases taken to Court.	54	27	3,969	4,069	1,835	2,021	404	389	6,262	6,506	5,719
B. Cases compounded.	76	62	15,532	15,864	6,937	7,112	1,059	1,087	23,604	24,125	22,654
C. „ undetected ..	1,056	788	577	716	261	362	17	44	1,911	1,910	1,848
Total ..	1,186	877	20,078	20,649	9,033	9,495	1,480	1,520	31,777	32,541	30,221

It will be seen that the total number of offences reported is 764 more than in the preceding year and 2,320 more than the average for the three preceding years. The number of offences in the Southern Circle is 44 per cent. and in the Central Circle 33 per cent. of the total. Forest crime is heaviest in the *South Arcot*, *Trichinopoly*, *Madura*, *Guntūr*, *Nellore*, *two Vellores* and *Chingleput* districts which return between them half of the total offences for the Presidency. The bulk of the reserved forests in these districts except *Madura* and *South Vellore* are scattered, of comparatively small area and contiguous to villages and cultivation. *South Arcot*, *Chingleput*, *Nellore* and *Trichinopoly* in particular are peppered all over with small reserves. This fact in itself is sufficient to explain the undue prevalence of forest crime in these districts. In the *Vellores*, there are many scattered reserves, while in *Madura* the steady denudation of zamindari forests and heavy demand for manure leaves for the Periyar area are causes which conduce to extensive illicit removals from the Government reserves. The measures already taken that will tend to reduce forest crime are the disafforestation of useless reserves and the transfer of grazing forests to panchayat management. These innovations which were commenced at the beginning of 1914 in consequence of the Forest Committee's report are being steadily introduced but will take a long time to carry through to completion and will affect reserves of minor importance only. They are not applicable to the more valuable forests where the prevention of crime cannot be tackled seriously until the department has been reorganised and unless some method can be devised of securing the co-operation of the people living in and adjacent to the forests in forest conservancy. The Board has recently laid before Government its conception of the measures that may advantageously be adopted to secure their co-operation.

11. The increase in the number of offences reported occurred under all heads except "injury to forests by fire". The number of offences of "illicit felling" and "illicit grazing" increased by 2·8 and 5·1 per cent. respectively. The increase in the number of offences under the former head occurred mainly in the districts of *Anantapur*, *Cuddapah*, *South Vellore*, *Trichinopoly* (in unreserves) and in *Madura*, while that under the latter head occurred chiefly in the districts of *Anantapur*, *Chingleput*, *South Vellore*, *South Arcot* and *South Salem*. The increase in the number of "other offences" is small and calls for no remarks. The number of cases of injury to forests by fire fell by 26 per cent.; the decrease, which was spread over all districts except *Ganjām* and *Kurnool*, was specially marked in the Western Circle.

As usual offenders responsible for the majority of fires were not detected. Detection was poor in *Ganjām*, *Kurnool West* and *South*, *Anantapur*, *Madura* and *South Canara*.

12. The percentage of cases taken to court, compounded and undetected to cases reported was 19·99, 74·14 and 5·87 against 19·70, 74·29 and 6·01 in the previous year. The total number of cases disposed of by courts rose from 6,401 to 6,737 and the percentage of acquittals to cases prosecuted slightly increased from 7·5 to 7·9.

The number of offences compounded by District Forest officers and Revenue Divisional officers was about the same as in the preceding year, but the amount of compensation fees realized fell from Rs. 2,14,180 to Rs. 2,08,959. The average per case was Rs. 9–13–5 against Rs. 10–1–4 in the previous year.

13. The rules laid down by Government in G.O. No. 1990, Revenue, dated 13th June 1910, and No. 3958, Revenue, dated 14th December 1910, for the guidance of forest officers in compounding offences of illicit grazing have worked satisfactorily in all districts.

14. The closure of forests to grazing as a punishment for systematic offences on a large scale was not considered necessary in any district except *Tinnevelly*, *Chittoor* and *Nellore*.

15. Rewards amounting to Rs. 2,023 were granted to informers and forest subordinates against Rs. 890 in the previous year. It is reported that rewards were sanctioned in two cases in *North Salem* division but the amount is not specified. This information should be given in future reports.

16. *Protection from fire.*—The system of fire protection adopted in most districts was the same as in the previous year, viz., the clearing of exterior and interior fire lines and patrol by watchers. The system adopted in *South Kurnool* division in the previous year of clearing fire lines through the agency of purchasers of the felled trees was tried in *Kurnool West*, but found unsuitable. In the matter of protection, the results show an appreciable improvement over the previous year. In areas over which special protection was attempted the percentage of failure materially decreased from 11·57 to 6·6, only 409 out of a total of 6,193 square miles attempted having been burnt. The cost per square mile successfully protected was Rs. 23–9–8 against Rs. 22–8–8 in the previous year. The excellent results obtained in *North* and *South Vellore* and *North Salem* deserve special notice as they are attributed to the co-operation of Malayalis who live on the Javadi and Chitteri hills. The measures taken to secure the co-operation of the khonds in *Ganjām*, the Koyas and Reddis in *Upper Gōdāvari*, and the hill tribes in *Lower Gōdāvari* and *South Coimbatore* divisions to protect the forests from fire in return for rewards and grazing concessions are also said to have produced satisfactory results. The system of the grant of rewards to the Chentsus in *Kurnool* has recently been condemned by the special officer and the Collector and the matter is now under the consideration of the Board. In addition to the areas under special protection, the ordinary staff attempted to protect 9,336 square miles against 9,096 square miles in the previous year of which 9,069 square miles were successfully protected.

17. The following statement compares the number and the origin of the fires which occurred during the year with those of the preceding year :—

	1913-14.		1914-15.	
	Number.	Area in acres.	Number.	Area in acres.
Fires originating in departmental fire conservancy operations.	81	17,065	88	20,161
Fires crossing exterior fire lines	183	226,029	174	164,934
Fires due to carelessness or accident	383	82,084	253	35,151
Fires originating from intention or malice	341	137,126	421	141,917
Fires due to unknown causes	762	253,976	457	92,110
Total ..	1,750	716,280	1,393	454,273

The number of fires and area burnt show a satisfactory decrease. The area maliciously fired was however greater than in the previous year in the *Kurnool East* and *South*, *Bellary*, *Anantapur*, *Cuddapah East* and *West* and *South Coimbatore* divisions. In cases of malicious firing detected in *North Salem*, *Tinnevelly* and *Trichinopoly*, the offenders were successfully prosecuted. The valuable forests in *North Malabar* and the Mudumalais in the *Nilgiris* which suffered severely last year were successfully protected. The results in three out of the four forest divisions in *Coimbatore* were unsatisfactory, nearly 90 per cent. of the fires in the Western Circle having occurred in those divisions alone. The three *Kurnools* were responsible for 31 per cent. of the fires in the presidency. The worst fire of the year was one which is said to have entered the Gudem range in *East Kurnool* from the *West Kurnool* division at four places and could not be controlled for nearly four days.

18. The Board regards the information about fire conservancy given in Circle reports as of little value and is now considering a suggestion made by Mr. Cox that special annual reports on this subject with fire maps attached should be submitted from every district in August and reviewed by the Board.

19. *Protection from cattle.*—3,380 square miles or 17 per cent. of the total area of reserved forests and reserved lands (19,639 square miles) were closed to all animals throughout the year and 102 square miles for part of the year against 3,242 and 104 square miles respectively in the previous year. 218 square miles of reserved forests and reserved lands were open to goats against 387 square miles open last year. Goats were completely excluded from the forests in the Northern, Southern and Western Circles and in the Central Circle the number is decreasing in accordance with the arrangement which gave the goat owners three years-grace in which to reduce or dispose of their flocks. Goats alone were excluded over an area of 15,292 square miles and goats and sheep over 647 square miles against 15,169 and 763 square miles respectively. A grazing scheme for *the Nilgiri* district sanctioned in G.O. No. 1943, Revenue, dated 6th July 1914, was brought into force in the district during the current year. A grazing scheme for the *Guntūr* district was approved by Government in July last and is to take effect from the current forest year. In their Memorandum No. 833-E/15-2, Revenue, dated 10th June 1915, Government have decided to defer passing orders on the Udumalpet grazing scheme pending settlement of the general principles on which grazing in future is to be dealt with.

The total number of animals licensed to graze on payment rose from 3,875,000 to 3,898,811 and the number of cattle impounded from 190,714 to 208,393. The Conservator, Southern Circle, gives an interesting table to show the grazing incidence in each district based on the actuals of grazing permits and states that the large area open to grazing is undoubtedly the cause of much of the offence which takes place and that the forests have very little chance of improvement. The Conservator, Central Circle, also states that the general incidence of grazing is far too high to permit improvement of the forests in many parts of the Circle.

20. *Protection against injuries from natural causes.*—Spike disease continued its attacks upon sandal in *North Salem*, *Trichinopoly*, *Kollegal* and *North Coimbatore* and is reported to have spread throughout the working circles in the two latter divisions. Signs of spike are said to have been found at Kuttalam but the observation is yet to be confirmed. Measures are being taken to check the spread of spike in *Kollegal* but it is too early to judge of their efficacy. Several plantations in Nilambur range and the young plantations of Nedungayam suffered severely from teak defoliators; the experiments tried with two Andre Maire traps were unsuccessful; one of the traps was soon destroyed by elephants, and the other was probably not correctly adjusted as it failed to attract moths. In *Lower Gōdāvari* the casuarina trees attacked by root fungus in the Kandikuppa plantation were at once removed and sold. The campaign against lantana was continued as usual with no definite results. Damage by sambhur was noticed especially near Mundanthorai in *Tinnevelly* where they are numerous but the sambhur themselves have recently been found dying off in large numbers from a foot affection.

(4) *Sylviculture.*

21. *Natural reproduction.*—The year was on the whole favourable for natural reproduction. Important species seeded well and progress was marked in protected areas and areas closed to grazing. Sandal is spreading rapidly in this way in the known sandal tracts as the birds carry the seeds. The Conservator of Forests, Southern Circle, made the interesting discovery during a tour in the Javadi hills, in *North Arcot*, that germination takes place in August. Reproduction of red sanders from coppice in *Cuddapah* and *Chittoor* districts is excellent. The seeding of the larger bamboo (*Bambusa arundinacea*) is spreading over wide areas in *South Canara*, *Malabar* and *Coimbatore* and the *Nilgiris* and if the partial seeding is followed, as is probable, by a general seeding, it will be a serious thing later for the timber floating industry and interfere for some years with any bamboo pulping schemes.

22. *Artificial reproduction.*—765 acres were added and 3,277 acres were excluded from the area of regular plantations, showing a net decrease of 2,512 acres, the corresponding decrease in the previous year being 1,957 acres. Cultural operations were carried on over an area of 3,207 acres at a cost of Rs. 5,861 against 9,002 acres at a cost of Rs. 20,237, the decrease being general in all the circles. Following the policy recommended by Mr. Beadon Bryant, Inspector-General of Forests, in 1913, expenditure on artificial reproduction is being steadily reduced. It has decreased from Rs. 1,49,985 in 1912–1913 and Rs. 87,418 in 1913–1914 to Rs. 63,369 in the year under report. Of this no less than Rs. 35,380 was spent on teak plantations in *West Kurnool* division mainly with the object of finding employment for the Chentsus and thus keeping them from forest crime. These plantations have now practically reached their limits and very little further planting will be done. They are not likely to prove a profitable investment and part of the expenditure on them should properly be regarded as made in the interests of law and order and not of the forests. The figures given in Form No. 75 in the Southern Circle report are reported to be misleading and full of inaccuracies. This is probably true in the case of other circles also. The Conservator, Southern Circle, reports that the numerous plantations and topes attached to bungalows are shown in some districts as " regular plantations ", in a few other districts as " taungya " and in some others under " cultural operations "; he has suggested that an additional heading ' topes ' should be opened in the return, under which bungalow plantations may be shown. His suggestion has been referred to the other Conservators for remarks.

23. *Operations for the improvement of growing stock.*—The operations undertaken during the year consisted as in previous years of improvement fellings, thinnings, fencing, creeper cutting, removal of inferior species, dead and dying trees, parasites and noxious growth and weeds. The Conservator, Central Circle, remarks that provided the coupes can be subsequently protected from cattle there is no better preliminary method of restoration than that of cutting back the degraded scrub jungle which forms so large a portion of the forest area in the circle. Stone walling which is by far the most effective method of protection from trespass was carried out in *Bellary*, *Anantapur* and *Cuddapah* but as the cost was prohibitive it had to be abandoned in the first two of these divisions.

24. *Experiments.*—Successful experimental cultivation was carried out in the following districts.

Sandal in *Vizagapatam* and *Kistna*; *Swietenia Mahogani* in *Vizagapatam*, *Cuddapah* and *South Malabar*; *Dalbergia sissoo* in *Bellary* and *North Vellore*; *Pterocarpus Santalinus* in *Ganjām*, parts of *Kurnool (South)*, *North Vellore* and *South Arcot*; *Swietenia Macrophylla* in *Malabar*; *Eucalyptus* in *Vizagapatam*; *Divi Divi* in *Gōdāvari Upper*; *Ceara rubber* in *Ganjām*; *Para rubber* in *Vizagapatam*; *Hardwickia binata* in *North Vellore* and *Edible date* in *Gōdāvari Upper*. The eleven varieties of Eucalyptus planted in the arboretum in Cairn Hill reserve, *Nilgiri* district, referred to in the previous year's report are reported to show very slow growth.

The following are other experiments conducted during the year:—

(1) Lac inoculation in *Kurnool West*, on certain varieties of trees with the aid of stick lac obtained from the Central Provinces.

(2) Mulberry cultivation started at Bairluti and Pecheruvu in *Kurnool West*. Both these experiments were undertaken principally with the object of providing permanent work for the Chentsus.

(3) Test of annual increment of tree growth—*Lower Gōdāvari* division.

(4) Test of the cost of floatage of dry bamboos in connection with Mr. Nelson's bamboo pulp scheme and of the effect of different felling methods on regeneration.

(5) *Exploitation.*

25. *System of management—Major produce.*—The various methods of the exploitation of major produce were, as in previous years, clear or regeneration fellings, thinnings, selection fellings, improvement fellings and coppice fellings. Clear or regeneration fellings were carried on mostly in *Gōdāvari Lower*, *Kistna*, *Kurnool West* and *South Arcot* and *Tanjore*. Thinnings were carried out in *Gōdāvari Lower*, *Kurnool East* and *West*, selection fellings were made as usual in timber coupes or where it was found necessary to eliminate dead and unsound trees. In the Southern Circle however only three coupes were worked under this system. Improvement and coppice fellings were undertaken principally in fuel coupes and in a few timber coupes and bamboo areas. Unregulated fellings under the permit system were made in Rampa in *Lower Gōdāvari* and in some unreserves. In reserves this antiquated system was chiefly confined to the extraction of bamboos in *Vizagapatam*, *Gōdāvari Upper* and *North Malabar*, of dead and wind blown trees in certain reserved forests of *South Malabar* of small timber and fuel in the *Nilgiris*, and of selected and marked timber for domestic requirements in two ranges of *Madura*.

26. *Minor produce and fodder greas.*—Minor produce was generally leased out. The manufacture of Catechu in *South Canara* and collection of miscellaneous produce in *North Coimbatore*, *Kollegal* and *Trichinopoly*, and in parts of the *Nilgiris*, *South Coimbatore* and *Nellore*, were carried out by departmental agency. Permits were issued in several districts for the removal of manure leaves, stones, gravel, etc. In the *Kurnools*, Chentsu agency was employed for the collection of minor produce. In *Ganjām*, the enjoyment of fruit trees in the majority of cases was left free to the Khonds. Fodder grass was removed on permit in *Madura*, *South Malabar* and *Coimbatore* and leased in *Gōdāvari* (*Lower*) and *Kistna*. In *Tinnevelly* grass was as in previous years included in minor produce leases. Ryots were allowed to cut and remove grass free from reserves in the three *Kurnools*, *Cuddapah*, *Chittoor*, *Nellore*, *Bellary*, *North* and *South Vellore*, *South Arcot* as also in *Anantapur* where however the concession was temporarily withdrawn in certain areas because the neighbouring villagers did not help in putting out fires. In *Bellary* 240 tons of hay were cut by a contractor against 250 tons in the previous year. The Military Department held leases of areas in *Bellary*, *Anantapur*, *East Cuddapah*, and *Vellore North* at Rs. 2 per ton of hay removed.

27. *Hay-making.*—Experimental hay-making operations in *East Cuddapah* and *Guntūr* referred to in the previous year's report, were abandoned. It was considered unnecessary for the Forest Department to continue these operations as the Military grass farms have for years been devoted to this industry.

28. *Grazing.*—The revenue from grazing and fodder grass, Rs. 6,96,334 was higher than in the previous year by Rs. 14,441. The increase in the Central Circle was due to a rise in the grazing revenue consequent on the imposition of enhanced fees for goat browsing in *Bellary*, to the extension of the Kancha system in *Nellore*, and to the increased number of grazing licenses issued in the upland taluks in *Guntūr*. The increase in the Western Circle was due to the introduction of the block system in the *Nilgiris*, to a larger number of foreign cattle licensed in *Kollegal* and to an increased demand for fodder grass in *North Coimbatore*. The other two circles showed a decrease; in the Southern Circle it was due to closure of reserves to goat browsing in *North Vellore*, *North Salem* and *Madura*, and in the Northern Circle chiefly in *Kistna* to the abolition of the parcellaire system, closure of reserves to goat browsing, closure to all animals of certain reserves under the provisions of working plans and to disafforestation of some reserves.

29. *Agency of exploitation.*—The subjoined table compares the outturn through all agencies of timber, fuel, bamboos and minor produce with that of the preceding year :—

Agency of exploitation.		Timber including sandalwood in cubic feet.		Fuel in cubic feet.	
		1913-14.	1914-15.	1913-14.	1914-15.
(1)		(2)	(3)	(4)	(5)
By Government Agency.	Northern Circle	280,305	250,028	1,459,059	868,935
	Central ,, ...	20,567	11,071	100,896	36,063
	Southern ,, ...	21,605	19,338	64,207	62,294
	Western ,, ...	256,604	437,121	1,634,965	640,149
	Total ..	579,081	717,558	3,259,127	1,607,441
By purchasers..	Northern Circle	1,813,9 8	1,288,226	3,877,747	4,459,851
	Central ,, ...	1,5-5,381	1,065,163	5,688,506	6,584,517
	Southern ,, ...	964,871	920,866	6,579,693	4,777,552
	Western ,, ...	370,524	468,886	2,532,559	3,937,306
	Total ..	4,734,744	3,743,141	18,678,505	19,759,226
By right holders	Northern Circle	189,507	184,136	792,444	582,195
	Central ,, ...	..	..	..	..
	Southern ,, ...	..	..	..	..
	Western ,, ...	49,077	36,175	..	..
	Total ..	238,584	220,311	792,444	582,195
By free grantees	Northern Circle	48,304	86,853	..	..
	Central ,, ...	84 180	38,543	..	..
	Southern ,, ...	47,810	90,493	26,689	3,984
	Western ,, ...	8,390	3,761	3,415	340
	Total ..	188,684	219,650	30,104	4,324
	Grand total ..	5,741,093	4,900,660	22,760,180	21,953,186

Agency of exploitation.		Bamboos.		Minor produce including grass and grazing value in rupees.	
		1913-14.	1914-15.	1913-14.	1914-15.
		(6)	(7)	(8)	(9)
By Government Agency.	Northern Circle	10,317	6,550	10,750	12,844
	Central ,, ...	196	226	18,941	14,701
	Southern ,, ...	277	201	706	531
	Western ,, ...	9,492	5,373	28,229	24,151
	Total ..	20,282	12,350	58,626	52,227
By purchasers..	Northern Circle	61,539	93,180	2,43,438	2,13,695
	Central ,, ...	11,060	14,945	6,92,586	6,31,218
	Southern ,, ...	112,914	101,789	4,29,093	3,82,215
	Western ,, ...	28,287	22,114	1,44,205	1,47,014
	Total ..	213,800	232,028	15,09,322	13,74,142
By right holders	Northern Circle	330	552	24,649	24,649
	Central ,, ...	..	..	150	151
	Southern ,, ...	..	..	2,389	2,105
	Western ,, ...	12	..	856	780
	Total ..	342	552	28,044	27,685
By free grantees	Northern Circle	454	671	78	2,836
	Central ,, ...	230	246	2,457	1,320
	Southern ,, ...	46	303	3,677	5,267
	Western ,, ...	169	67	470	270
	Total ..	899	1,287	6,682	9,693
	Grand total ..	235,323	246,217	16,02,674	14,63,747

30. There was a decrease in the output under all heads except bamboos. The increased outturn of timber from departmental working in the Western Circle was chiefly in the two divisions of *Malabar*, due to the exploitation of a larger area in the Begur Working Circle and to a larger yield from thinnings and wind-blown trees in teak plantations, and in the *Nilgiris* to the improvement fellings carried out in the Mudumalai Working Circle. The other three circles showed a decrease. Similarly timber removed by purchasers decreased, in all the circles, except the Western. The decrease was due in the Northern Circle to a lack of demand, in the Central to smaller removals from darkhast lands and in the Southern to a fall in the collection of tree value from lands assigned on darkhasts in *Madura* and *Tinnevelly* and also to the non-sale of timber coupes in *Madura*. The increase in the Western Circle was due mainly to extensive sales of trees on darkhast lands chiefly in *South Canara*.

The quantity of fuel extracted by departmental agency decreased in all the circles and the quantity removed by purchasers increased in all the circles except the Southern. In the Southern Circle the decrease in the output was due chiefly to the sale of a lesser number of coupes in *North Vellore*, *North Salem*, *Trichinopoly* and *Madura* and to the limited sale of trees on tank beds in *Madura* and *Tinnevelly*.

31. The value of bamboos extracted by departmental agency decreased in all the circles except the Central. The increase in the latter was due to a greater number of bamboos exploited for departmental purposes in *Bellary* and *East Cuddapah*. The value of bamboos removed by purchasers increased in the Northern and Central Circles; but this was counterbalanced by a decrease in the other circles. The decrease in the Southern Circle is due to the comparatively poor yield from coupes leased in *North Vellore*, to the failure of certain bamboo contractors in *North Salem* to pay the instalments due in time, and to the major portion of sale amounts of 1914–15 having been paid in the latter part of the previous year in *Trichinopoly*. The number of bamboos removed by purchasers increased by nearly 53 per cent. in the Western Circle mainly in *South Canara* due owing to the sale of coupes to contractors. The price however was lower but no explanation has been given of the fall.

32. The value of *minor produce* extracted by departmental agency decreased in all the circles except the Northern. In the Central Circle the fall is due to the failure to sell the Nux-vomica crop in *Nellore*, in the Southern to the extension of the contract system of working and in the Western to a poor crop of gallnuts, honey, etc., in *North Coimbatore*. The value of minor produce removed by purchasers decreased in all the circles except the Western. The decrease in the Northern Circle has not been explained. It was due in the Central Circle to the smaller collection of tangedu bark in *Bellary* and to the very marked fall in the demand for mica in *Nellore* owing to the war, and in the Southern to the stoppage of the trade in barks for the same reason, to the closure of reserves to goat browsing in *North Vellore*, *North Salem* and *Madura*, and to a fall in the amounts of miscellaneous leases. The increase in the Western Circle was due to larger grazing collections.

33. The estimated value of forest produce removed by right-holders was Rs. 53,291 against Rs. 59,978 and of produce granted free Rs. 29,073 against Rs. 24,959.

(6) *Financial results.*

34. The following statement exhibits the financial results of the year as compared with those of the previous year and with the average of the preceding five years :—

Years.	Revenue.	Expenditure.		Total.	Surplus.
		A. Conservancy works.	B. Establishments.		
	Rs.	Rs.	Rs.	Rs.	Rs.
1914–1915	40,17,852	13,89,296	15,47,355	29,36,651	10,81,201
1913–1914	40,48,812	13,62,460	14,78,482	28,40,942	12,07,900
Average for the * five years preceding 1913–1914.	40,39,801	18,65,190	13,50,297	32,15,487	8,24,314

* The corresponding figures given in the last year's report were incorrect—*vide* erratum at the end of the Appendix hereto.

The revenue fell by ·31 lakh while the expenditure under "A. Conservancy and Works" and "B. Establishments" rose by about ·27 and ·69 lakh respectively. The net result was a surplus of 10·81 lakhs which is 1·27 lakhs less than that of the previous year. The Southern Circle stands first, as in the previous years, with a surplus of 6·22 lakhs and the Central Circle next with 4·39 lakhs. The Northern Circle shows a surplus of ·39 lakh against ·45 lakh in the previous year while the Western Circle returns a deficit of ·19 lakh against a surplus of ·46 lakh.

35. In the preceding paragraphs the decreases under the different heads of Revenue have been explained in detail. Generally speaking they may be attributed to the influence of the war.

36. As regards expenditure the increase under "A. Conservancy and Works" (including refunds) was entirely in the Western Circle and was due to an extraordinary charge of Rs. 1,74,849 incurred in the acquisition of the Mudumalai and Kumbarakolli leased forests in the *Nilgiris*. Otherwise all circles show a uniform decrease owing to the change from departmental to contract working. In the Central and Southern Circles, the further reason assigned for the decrease is the short programme of construction of roads and buildings and the curtailment of planting operations and the discontinuance of the hay-making operations in *Cuddapah* and *Guntūr*.

Increased expenditure under B. Establishment was owing mainly to the following causes:—

(1) The debit to the Forest Department of the salaries of the special officers and their establishments appointed for the control of the Chentsus of *Kurnool* and for the formation of Forest panchayats;

(2) the entertainment of a special establishment for selection of blocks in the Rampa country (Gōdāvari district);

(3) the entertainment of a temporary establishment for the Working Plans Officer throughout the year;

(4) the payment in India of leave allowance to a Conservator on leave in England; and

(5) the entertainment of additional temporary executive and protective staffs.

37. The following statement shows the financial results of the year after deducting capital expenditure not yielding an immediate outturn:—

	Rs.
Gross revenue	40,17,852
Value of produce removed by right-holders and free grantees	82,364
Total	41,00,216
Gross expenditure	29,36,651

Deduct expenditure not yielding an immediate return:—

	Rs.
(1) Communications and buildings	2,92,755
(2) Cultural operations	72,846
(3) Working plans	6,187
(4) Settlement	1,89,921
(5) Surveys	29,217
(6) Demarcation	33,843
Total	6,24,769
Balance of direct revenue producing expenditure	23,11,882
Surplus of revenue over expenditure directly chargeable to revenue	17,88,334

38. *Administration.*—Mr. R. C. C. Carr was Head of the Forest Administration up to the 8th January 1915 and was succeeded by Mr. H. F. W. Gillman, who was Forest Commissioner for the rest of the year. Mr. Carr toured in the districts of *Kurnool*, *the Nilgiris*, *Coimbatore*, *Malabar* and *Tinnevelly*. In the *Kurnool* district he conferred with the local officers regarding the control of the Chentsus, and the appointment of a special officer to formulate a regular scheme was the outcome of the conference. His visit to Nilambur (*Malabar*) was specially to consider the erection

of a standing camp for the Forest College. In *Tinnevelly* he discussed with the local officers the classification of Forests and the question of raising the grazing fees of some blocks in the district. Mr. Gillman toured in the *Kurnool*, *Cuddapah*, *Chittoor*, *Vizagapatam* and *North Arcot* districts and visited *Coimbatore*. The inspection notes of the tour in the first four districts have been printed and copies submitted to Government. The tour to *Kurnool* was chiefly in connection with grazing questions and those in *Cuddapah* and *Chittoor* with the protection of the red sanders forests. The tour in the *Vizagapatam* district was confined to the Madgole Agency and the outcome of the tour is the formulation of rules under section 26, since sanctioned by Government, to regulate the clearing of forest land for "podu" cultivation. At *Coimbatore* he was present at the final examination of the Forest College (1913—15) course and presided over a meeting of the Board of Visitors.

39. Messrs. A. W. Lushington and C. D. McCarthy were in charge of the Northern and Western Circles throughout the year. Mr. J. S. Battie held charge of the Southern Circle down to 2nd November 1914, when he retired from service and was succeeded by Mr. P. M. Lushington. The charge of the Central Circle was held by Mr. H. B. Bryant until 25th January 1915, and by Mr. S. Cox for the rest of the year.

The Conservators inspected all the District Forest offices and visited all the districts in their charge except *Trichinopoly*, *South Arcot* (Southern Circle), *South Canara*, *Coimbatore North and Central* (Western Circle), *Anantapur*, *Nellore* and *Cuddapah West* (Central Circle). All District Forest Officers except those of *Vizagapatam*, *Tinnevelly*, *South Malabar*, *the Nilgiris*, *Kollegal* and *Central Coimbatore* spent sufficient time in touring; the short touring of these officers has been satisfactorily explained. All range offices except one each, in *Cuddapah East*, *Cuddapah West*, *Nellore*, *Malabar North*, *Malabar South* and *the Nilgiris* were inspected by the District Forest Officers or their Assistants. The accounts of District Forest offices except those of *Kurnool East and West*, *Guntūr*, *Chingleput*, *South Canara* and *Coimbatore South and Central*, were inspected by auditors from the Accountant-General's office and the results were reported to be generally satisfactory.

40. The year under report was not marked by any event of special importance. Considerable progress was made with the classification of forests on the lines laid down by the Forest Committee and with the formation of panchayats for grazing forests of Class V. The classification of forests has been completed except in *Kurnool*, *Salem* and *South Arcot* Revenue districts for which districts however the areas of forests of classes III (plantations) and V (grazing forests) and VI (useless forests) have been determined. The results obtained so far are that out of a total area of 18,863 square miles of reserved forest in the Presidency at the beginning of the year, 67 square miles have been placed in class III, 1,468 in class V and 248 in class VI. As the scientific investigation of forests of other classes progresses, some further small additions are likely to be made to classes V and VI and it seems clear that at least one-tenth of the total forest area will eventually pass from the control of the Forest Department.

Progress in the formation of panchayats must necessarily be slow as care has to be taken in the initial selections made in each district so that failures which would discourage the people from taking up fresh areas, may be avoided as far as possible. During the year, 84 panchayats were actually working and the area of forest in their charge was 56 square miles. In addition, 30 panchayats have so far been sanctioned which are to commence working in 1915–16. The results of working are reported to have been generally satisfactory.

In February 1915 Mr. E. A. Davis, I.C.S., was placed on special duty for six months to promote the formation of panchayats and the period of his employment has since been extended by another six months. He has done valuable work in the districts of *Bellary*, *Cuddapah*, *Chittoor*, *Chingleput* and *South Arcot*. Another special officer, Mr. H. M. Hood, I.C.S., was appointed for a period of six months to prepare a scheme for the control of the Chentsus in the Kurnool district. This scheme has been received by the Board and will shortly be submitted to Government.

The proposals made by the Board in the previous year for the entire reorganisation of the Forest Department had to be withdrawn as requirements in the matter of the subordinate staff were found to have been under-estimated. Revised proposals will very shortly be submitted to Government.

41. The Board desires to record its high appreciation of the work of all the Conservators and endorses the opinions expressed in their reports on the work of the officers of the Imperial and Provincial service who have been specially commended. Mr. A. W. Lushington who has since retired after 32 years of meritorious service received the title of C.I.E. and Mr. E. C. M. Mascarenhas that of Rai Sahib.

42. *Madras Forest College, Coimbatore.*—Mr. F. L. C. Cowley Brown was Principal of the College throughout the year. Mr. C. B. Dawson filled the post of the Imperial Instructor of the College throughout the year and Mr. H. C. Bennett joined the post of second Imperial Instructor on 4th December 1914 and continued in the College for the rest of the year. The second batch of trained Rangers passed out of the College in June 1915, four receiving Honours Certificates, 24 the Higher Standard and one the Lower Standard Certificate; they were also examined in First Aid by the District Medical and Sanitary Officer of Coimbatore, and 25 were successful in gaming the St. John Ambulance Association Certificate. The Forest Commissioner presided on the occasion when the College prizes and certificates were awarded. During the year under report 32 students joined the College for the 1914–16 course; of these, two were withdrawn from the College for incapacity leaving 30 in residence at the close of the year. This number comprises 20 Government students (5 from each Circle), 4 students from Travancore, 1 from Mysore and 1 from Cochin, and 4 private students. The Hon'ble Mr. Cardew and the late Forest Commissioner visited the students at field work in head-quarters and the present Forest Commissioner inspected the camp and road construction operations at Ootacamund. The new buildings of the College were nearly complete during the year and were opened by His Excellency the Governor of Madras after its close. The Gass Forest Museum has been moved to the College buildings and taken charge of by the Principal. The Board of Visitors met at Coimbatore in June when the final examinations were held and passed a number of resolutions and a draft calendar of the College. The resolutions are now before Government and the calendar which has been modified in parts by Government is in the Press.

The College continued to do good work under the able Principalship of Mr. Cowley Brown who has since been promoted to the post of Conservator and the whole staff worked with zeal and energy.

43. *General-Rules under the Forest Act.*—The working of the timber and sandalwood transit rules was satisfactory. The privileges allowed by the rules under section 26 of the Forest Act were generally availed of by the people and there were no complaints of any importance except from *Ganjām* where a serious abuse in connection with the valuation of tree growth was detected and the Deputy Ranger concerned dismissed and from *Kurnool West* where it is said that in the Yerramalai ranges a tendency exists to denude the unreserves for purpose of trade in timber and fuel.

Improvement of water-supply in Government grazing grounds (G.O. No. 1622, dated 4th June 1914).—The Circle-reports show that there is no necessity for improvement of water-supply in the Western Circle except in *Coimbatore* where some steps are said to have been taken and that in the Southern Circle the matter has not been properly attended to so far. In the Central Circle, wells and ponds were constructed, repaired or deepened in all the districts except *Bellary* and *Chingleput*. In the Northern Circle, steps were taken to improve water-supply in *Gōdāvari Lower* and *Kurnool South* but the reports from the other districts of the Circle are silent in the matter.

Opening of small coupes in the vicinity of villages for rural supply—Paragraph 20 of the orders of Government on the Forest Committee's report.—It is reported that there was no demand for such coupes in the Western Circle and that in *North Coimbatore* where one or two such coupes were opened or advertised, there were no offers; in the Central Circle coupes are being opened wherever there is a local demand; in the Southern Circle sale of fuel at the edge of the forests is generally carried on by coupe-

contractors in *North Vellore*, *Trichinopoly* and *Madura*; in the Northern Circle the Conservator reports that in *Kurnool South* small coupes in grazing areas are being marked for sale and that in *Gōdāvari Lower* no demand has arisen: no information has been furnished on the point in regard to the other districts of the Circle.

Patrol system — Paragraph 22 (1) *of the Government Order on the Forest Committee's report.*—The patrol system is being introduced in many districts but with the present limited staff, the system cannot be effective as it is impossible to constitute the sections without either leaving a considerable portion of the forests without inspection or making the sections so large that inspection at one end would leave the rest of the section unprotected for too long a period; further there are not at present a sufficient number of intelligent Deputy Rangers to captain the gangs. When the reorganisation of the staff is sanctioned and brought into force, the system can be more widely extended.

Inducement of villagers to aid in the work of conserving adjoining forest — Paragraph 22 (2) *of the Government Order on the Forest Committee's report.*—A report has recently been submitted to Government by the Board on the subject of the formation of "Forest villages" and the inducement of ryots of these villages to aid in the conservancy of forests adjoining their villages and entrusted to their care, by a system of rewards and punishments. The orders of Government on the scheme are awaited.

Forest Conference.—Three conferences were held by the Forest Commissioner with Conservators during the year, two at Madras and one at Coimbatore, and various forest questions — chief among them being the reorganisation of the department — were discussed. Copies of the proceedings have been submitted to Government.

Forest Literature.—Mr. A. W. Lushington's book entitled "Vernacular list of trees, shrubs and woody climbers in the Madras Presidency" was published during the year. It is now in contemplation to prepare "Descriptive lists," on the lines referred to in Resolution XIV (iii) of the Board of Forestry, 1913, in a handy pocket book form, from the information contained in Mr. Lushington's work.

44. A memorandum of minor discrepancies found in the circle reports is appended.

(True Extract.)

G. T. H. Bracken,
Ag. Secretary.

To the Secretary to Government, Revenue Department, with appendices.

APPENDIX.

Northern Circle.

(i) Appendices C and D are not among the returns prescribed in the Forest Code for submission with the Forest annual report. They should not be printed in future circle reports.

(ii) *Form No.* 65.—The area of reserved lands, viz., 320,636 acres works out to 501 square miles and not 502 square miles as shown in column 13 of the return.

(iii) *Form No.* 67.—The entry in column 2 against Ganjām is not understood. If it represents the previous year's figure as explained in the foot-note it should not find place in that column, for the length of boundaries newly demarcated during the year should alone be entered therein.

(iv) *Form No.* 74.—(*a*) The figures 27,249, 283,534, and 45,760 in columns 7, 13 and 24 respectively against total in the set of figures above unreserved lands are mistakes for 27,239, 55,834; and 45,770.

(*b*) The figure 8,160 in column 11 against total of unreserved lands is a mistake for 8,155.

(*c*) The figures 34,564; 57,661; 320,919; and 45,760 in the columns 7, 11, 13 and 24 against grand total are mistakes for 34,554; 57,656; 93,219 and 45,770 respectively.

(*d*) The figure 17,148 in column 29 against total unreserved lands is a mstake in totalling for 18,148. The figure in the same column against grand total should be altered into 132,355.

(*e*) In the abstract statement at page XVI of the appendices, the figures 64,107; 587,753 and 866,732 are mistakes for 64,097; 360,053; and 639,022.

(v) *Form No.* 77.—The value of grazing and fodder grass removed by purchasers is shown as Rs. 1,20,502 in column 5 of the statement. In form No. 80, the revenue realized in the Circle from the same source is shown as Rs. 1,20,589. The discrepancy has not been explained.

(vi) *Form No.* 82.—The figure in the total column against Kurnool South works out to Rs. 1,07,722 and not Rs. 1,07,772.

(vii) *Form No.* 85.—The figures in the column "in favour of the year" against Gōdāvari Upper and Kurnool South should be 7,127 and 4,375 and not 9,927, and 5,492. The figure in the same column against total is wrong and should be omitted. In the total column "against the year" should be inserted 3,008.

CENTRAL CIRCLE.

(i) *Form No.* 69.—The area for which working plans have been completed, and approved by the Board in the Guntūr district during 1913–14 was shown as 41 square miles in column 2 of the return for that year. In the same column of the statement for 1914–15 it is entered as 8 square miles without any explanation. Similarly the area for which working plans have been sanctioned by the Board for Cuddapah East division during 1913–14 was shown as 109 square miles in column 2 of the return for that year. In column 2 of the statement for 1914–15 it is shown as 103 square miles. The discrepancy has not been explained.

(ii) *Form No.* 71.—Forest offences compounded by District Forest Officers or the Revenue Divisional Officers should be exhibited under the heading of acquittals in columns 11 and 12 and not in columns 9 and 10 — *vide* paragraph 2 of Government Order No. 1101, Revenue, dated 8th May 1915, communicated with Board's Proceedings Forest No. 108, dated 19th July 1915.

SOUTHERN AND WESTERN CIRCLES.

Form No. 71.—Forest offences compounded by District Forest Officers or Revenue Divisional Officers should be exhibited under the heading of acquittals in columns 11 and 12 and not in columns 9 and 10 — *vide* paragraph 2 of Government Order No. 1101, Revenue, dated 8th May 1915, communicated with Board's Proceedings Forest No. 108, dated 19th July 1915.

Erratum to paragraph 32 *of Board's Proceedings Forest No.* 226, *dated* 26*th November* 1914.

For the figures in the column "Average for the five years preceding 1912–13, viz., Rs. 40,39,801; Rs. 18,65,190; Rs. 13,50,297; Rs. 32,15,487, Rs. 8,24,314 *substitute* Rs. 39,87,652; Rs. 19,02,592; Rs. 12,69,150; Rs. 31,71,742; Rs. 8,15,910 respectively.

Order—No. 95, Revenue, dated 15th January 1916.

Forest No. 7.

With the proceedings read above the Board submits, with a covering review, the annual report on forest administration for the year ending 30th June 1915. The volume of the statistical portion of the report has been substantially reduced as a result of the examination referred to as in progress in paragraph 1 of the Government Order on the report for the previous year. There has been a reduction of some fifty pages by the discontinuance of statements found to be unnecessary and the simplification of other appendices the retention of which in a modified form was considered to be essential. The Government will now proceed to notice some of the more salient matters dealt with in the report.

2. *Paragraph* 3 *of the Board's resolution.*—The Board rightly calls attention to the slow rate at which settlement operations have been proceeding in the Upper Gōdāvari district; the Government trust that the instructions issued will remedy this defect.

3. *Paragraph* 4 *of the Board's resolution.*—The separate report called for with regard to the need to carry out the demarcation of the proposed new boundary between the Nilgiris and Central Coimbatore should be submitted to Government with the recommendations of the Board.

4. *Paragraph* 5 *of the Board's resolution.*—The Government have not received, and will be glad now to be supplied with copies of the recently published index map of the Madras Presidency showing the limits of controlling and executive charges; three copies should be furnished.

5. *Paragraphs* 6 *and* 7 *of the Board's resolution.*—The report furnishes evidence of the advantages of employing special officers to prepare working plans and the Government agree with the Board that there is ample scope for the entertainment of one such officer in each circle. Work of this character is of a very responsible nature and the personnel selected for it should be of the highest quality available.

6. *Paragraph* 8 *of the Board's resolution.*—The entertainment of special temporary engineers for the investigation and construction of forest roads marks a new departure of considerable importance. In order to secure the full commercial return possible from the Government forests it is essential to provide adequate communications but in the past for lack of thorough investigation and expert assistance there has been much wasteful expenditure on roads and bridle-paths. The right policy to pursue has been indicated by the Forest Commissioner in his inspection notes on the Kurnool district; attention should be concentrated on roads, in existence or to be constructed, which connect the most important working areas with the neighbouring markets and endeavours should be made to put such roads into thoroughly good working order. Well-considered expenditure in this direction should make valuable coupes accessible and remove the difficulties in transport which Conservators cite in more than one instance as preventing district officers from carrying out the prescriptions of working plans.

7. *Paragraphs* 10 *to* 12 *of the Board's resolution.*—In these paragraphs the Board, while referring to the continuing increase in the number of forest offences reported, anticipates improvement from the disafforestation of useless reserves and the transfer of grazing areas to the management of panchayats, measures which are now in progress, and the Government share the Board's hopes on this subject. Attention is also drawn to the importance of devising methods to secure the co-operation of the people living in or near the reserves in the work of forest conservancy. The circle reports contain numerous references to the value of such co-operation on the part of hill tribes and the Government in passing orders on proposals recently received from the Board with regard to the lines of grazing policy have laid special stress on the advantages likely to be derived from the introduction of a judicious system of rewards for successful co-operation in conservancy coupled with penalties for failure to render that amount of assistance which may reasonably be required from the local residents. The underlying principle should be to graduate the incidence of grazing revenue with reference to the degree of co-operation from the cattle-owners. A further gradual reduction in the number of forest offences may perhaps be expected when the development of communications and the much-needed reorganization of the staff render it feasible to extend the area under intensive working; practical experience in various districts has proved that crime tends to decrease as the forests are brought under systematic working, whether the agencies employed be departmental or consist of contractors.

8. *Paragraphs* 16 *to* 18 *of the Board's resolution.*—The improvement in the degree of success ascribed to measures of fire protection would seem from the circle reports to have been largely attributable to seasonal conditions and perhaps also to the incomplete reporting of fires. The assistance rendered by the Malayalis in the Javadi and Chitteri hills is however matter for special congratulation.

9. *Paragraph* 19 *of the Board's resolution.*—As stated in paragraph 7 above the Government have recently laid down the lines on which grazing shall in future be dealt with. Some enhancement in the scale of grazing fees is inevitable, not only in order to reduce the grazing incidence which is frequently so high as to entail continuous deterioration of the forest growth, but also to provide for the system of rewards and penalties by which it is hoped to enlist the co-operation of the people. The exclusion of goats from reserved forests is essential to efficient reservation and this condition is now within measurable reach.

10. *Paragraph* 20 *of the Board's resolution.*—It is much to be regretted that there has been a further extension of the spike disease which does so much damage to sandal and the Government trust that the special measures in progress in Kollegal, which are mentioned in paragraph 19 of the Western Circle report, will go some way towards indicating efficient methods of prevention. This is the more important in view of the more rapid rate at which sandal is now observed to be spreading by natural reproduction.

11. *Paragraph* 22 *of the Board's resolution.*—In this paragraph the Board brings out the thorough manner in which effect has been given to the policy commended by Mr. Beadon Bryant of restricting expenditure on artificial reproduction.

12. *Paragraphs* 25 *to* 33 *of the Board's resolution.*—As these paragraphs show, another direction in which the policy laid down by Government has been energetically carried out is the extension of the employment of contract agencies for the exploitation of the forests.

13. *Paragraphs* 34 *to* 37 *of the Board's resolution.*—The financial result of the year's working was a surplus of 10·81 lakhs. The decrease of approximately a lakh and a half as compared with the record figure reached in the preceding year is accounted for by a single altogether exceptional item, namely, the expenditure of 1·75 lakhs on the permanent acquisition of a leased forest. But for this item the surplus would have been larger than in any previous year. The figures given in paragraph 37 of the Board's resolution endeavour to show the surplus of revenue over expenditure not properly chargeable to capital heads and similar calculations are to be found in paragraph 41 of the report for the Northern Circle. The Government would be glad if in future reports this aspect of the financial results could be brought out more clearly. It would seem necessary, however, to distinguish more precisely between outlay which a business man would charge against capital and items of expenditure not yielding an immediate return which are nevertheless of a recurring nature; for instance, the first item of deduction in the Board's figures apparently consists of the whole outlay on communications and buildings, though a considerable proportion thereof presumably relates to annual maintenance charges. Subject to these remarks, the Government would welcome an examination of the question what proportion of the annual expenditure may properly be regarded as in the nature of capital outlay justified by an ultimate return of interest at a fair rate.

14. *Paragraph* 40 *of the Board's resolution.*—In this paragraph the Board furnishes particulars of the progress made with the classification of forests and the formation of forest panchayats in accordance with the recommendations of the Forest Committee. The classification work has now nearly been completed and the Board states that at least one-tenth of the present forest area will ultimately pass from the control of the Forest department, mostly into the hands of panchayats. In the formation of these bodies valuable assistance has been rendered by Mr. E. A. Davies, I.C.S., who was placed on special duty for the purpose. The Board reports that the results of the working of the 84 panchayats so far formed have been generally satisfactory and the Government hope that this important new development will achieve a fair measure of success. The circle reports show that in certain cases the management has left very much to be desired but it is too early at present to form any final opinion on the prospects of the movement. The tendency which has been shown by some panchayats in the Coimbatore district to admit numbers of cattle in excess of the grazing possibilities was perhaps to be expected at first but on the other hand it is stated that a feature of panchayat management in the same district is the immediate and substantial enhancement of the scale of grazing fees which suggests that the evil of indiscriminate grazing is recognized by the villagers. The old Government fee of As. 3 per head has been raised in some cases to Re. 1 and even Rs. 1-8 per head.

15. *Reorganization of the Forest department.*—The Government await the revised proposals which the Board is about to submit and trust that financial conditions will improve sufficiently to admit of the early introduction of the reorganization which by common consent is necessary. Apart from the crying need for additions to the superior controlling staff, especially working plans officers, and a larger establishment of trained subordinates, the effective application of the patrol system commended by the Forest Committee is impossible with the present limited protective staff; as observed in paragraph 66 of the Central Circle report, however, such patrols cannot altogether take the place of resident staff, the latter being necessary to supply sufficient local information. In so far as the contemplated reorganization improves the conditions and prospects of service, it should also go some way to raise the standard of conduct, which in the lower grades at present leaves much to be desired.

Much consideration was devoted during the year under report to the elaboration of amendments to the Madras Forest Code designed to place District Forest Officers

in a position of greater independence and responsibility than they have hitherto enjoyed. The Board's final proposals on this important matter have now been fully examined and the orders of Government will shortly issue.

16. The working of the Forest College at Coimbatore continued to be satisfactory.

17. Finally the Government desire to endorse the Board's remarks on the good work of the Conservators, the Principal of the College and other departmental officers and to express their appreciation of the energy and ability with which the department has been controlled by the Forest Commissioner himself.

(True Extract.)

L. DAVIDSON,
Secretary to Government.

To the Board of Revenue, Land Revenue (Forests).
,, Accountant-General.
,, Government of India, Department of Revenue and Agriculture (with C.L.).
,, Inspector-General of Forests (with C.L.).
Editors' Table.

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